

October 17, 2014

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CITY OF MONTH

Project:

Hager Critical Areas Reconnaissance

Project Site:

Parcel 27060200301900

Monroe, WA 98272

Client:

Jim Hager

21314 Calhoun Road Monroe, WA 98272 360-794-5106

Mr. Hager:

We completed a critical areas reconnaissance on Parcel 00777800000300, located in Monroe, Washington on October 14, 2014. We surveyed the entire parcel to determine whether any wetlands or streams are present. Data for sample plots P1-P5 are attached and their locations are shown on the attached figure.

In order for an area to be designated a wetland, evidence of hydrophytic vegetation, hydric soil, and wetland hydrology must all be present. Facultative herbaceous species dominate the site. Facultative vegetation meets the technical definition of hydrophytic or wetland vegetation. Blackberry thickets (facultative upland species) are present along the western and northern fence lines and a row of Douglas fir trees (facultative upland species) is present along the northern fence line. No indicators of wetland hydrology were observed in the sample plots or anywhere on the parcel. The City of Monroe drainage map shows drainage conveyances on the east, south and west sides of the parcel. The conveyance on the west side appears to be buried. The parcel appears to be effectively drained by the surrounding ditches.

Mapped soil units on the northern two-thirds of the parcel are Bellingham silty clay loam and Sumas silt loam, both listed hydric soils. The mapped soil unit on the southern one-third is Puyallup fine sandy loam. Soils in the southern one-third of the parcel matched Puyallup characteristics. Soils in the northern two-thirds did not match the typical profile for either Sumas or Bellingham soils. The surface layers are dominated by silt loam (see attached data sheets) but a light colored layer of clay loam, was encountered at depths of 9-12 inches in the pits. Redoximorphic features were present in the layer of clay loam, however, their physical characteristics indicate they are likely relict features that were formed before the site was effectively drained. The boundaries of the redoximorphic features are sharp, not diffuse as would be expected in actively hydric environments, and most were soft and crumbled to a powder when touched. No active pore linings or oxidized rhizospheres were observed in any of the soil pits. The matrix color of the clay loam layer was also lighter than the typical color of that layer in Sumas soil which likely indicates effectively drained conditions. According to the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Region, Version 2.0* (USACOE, 2010), relict features still meet the technical definition of a hydric soil.

No evidence of current wetland hydrology was observed in any of the soil pits or anywhere on the parcel and the redoximorphic features appear to be relict indicating the parcel is effectively drained. Therefore,

there are no areas on the parcel that meet the technical definition of a wetland according to the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Region.

A wetland delineation was done in 2001 for a large wetland located on parcels to the north and east (Harmsen and Associates Drawing S1, attached). This wetland is shown as "Wetland 14" on the City of Monroe Critical Areas and Buffer Map (attached). Based on the 2001 delineation, the buffer for Wetland 14 abuts Parcel 27060200301900 along the eastern edge and northeast corner.

A perennial channel, called an "unclassified stream" on the City of Monroe Critical Areas and Buffer Map, is present in the southwest corner of the parcel. Washington Department of Fish and Wildlife Salmonscape maps show this stream as "modeled" salmonid habitat but known fish use has not been documented on the maps (apps.wdfw.gov/Salmonscape).

A constructed stormwater retention area, which collects runoff from the parking area south of the building, is present in the southwest corner of the parcel.

It was a pleasure working with you. Let me know if you need additional information or further assistance on this project.

Regards,

Mary Harenda

President

Essency Environmental

Attachments:

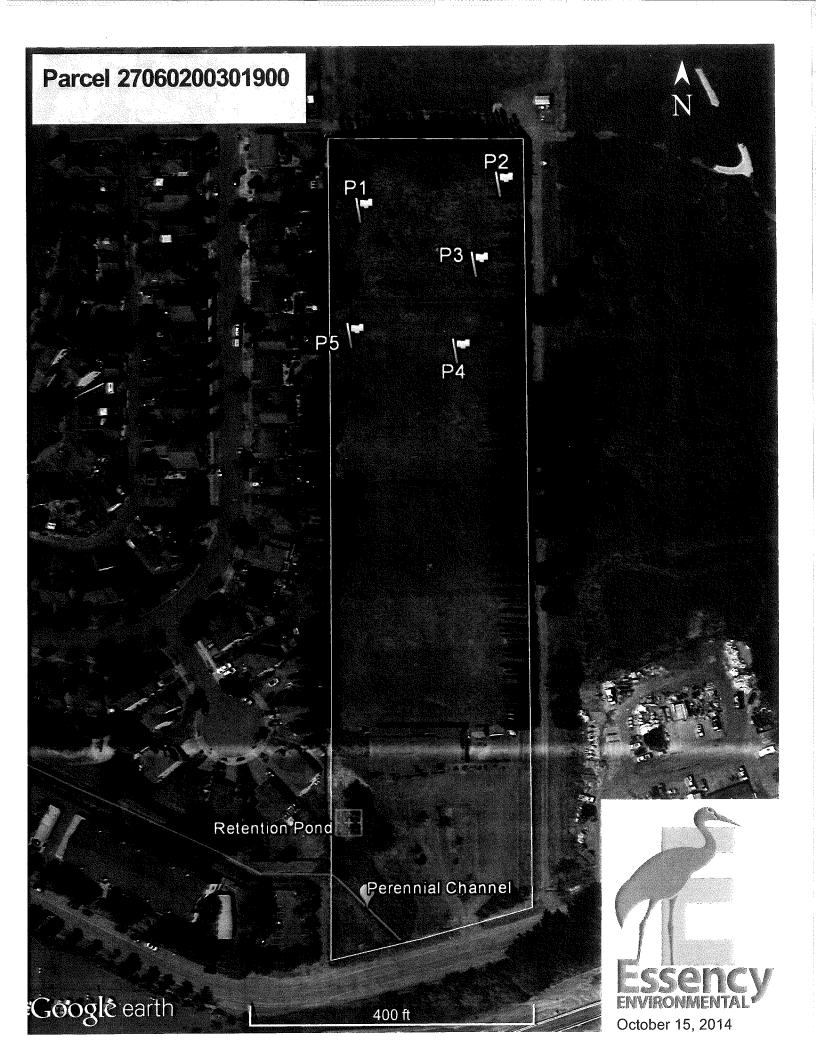
Locations of sample plots

Wetland delineation data sheets

Maring Barowskie

City of Monroe Critical Areas and Buffers Map

City of Monroe Currie Road Wetland Mapping, prepared by Harmsen and Associates



Project Site:	Hager- 27060200301900			City/Count	ty: <u>Monroe/Snohomish</u> Samp	oling Date:	10/14/14	
Applicant/Owner:	Jim Hager			Only/Oddin			<u>P1</u>	
Investigator(s):	Mary Harenda & Andrew Wones				Section, Township, Range: 2,	· ·		
Landform (hillslope, te			Local	relief (conca	ave, convex, none): none	Slope (%): 1	
Subregion (LRR):	A	Lat: 47.8		10,101 (00,100	Long: -122.007652	Datum: W		
Soil Map Unit Name:	Mapped as Sumas silt loam	201. 17.0			NWI classification			
	ic conditions on the site typical for	this time of v	ear? Ye	es 🛛	No [] (If no, explain in Rem			
Are Vegetation			antly disturbed		Normal Circumstances" present?	_	⊠ No	
Are Vegetation		•	y problematic?		eded, explain any answers in Remarks			
, as regeration.	2,,	_,	,	•	, ,	,		
SUMMARY OF FIN	IDINGS – Attach site map sł	nowing san	npling point	locations,	transects, important features, e	tc.		
Hydrophytic Vegetatio	n Present?	Yes 🛛	No 🗆		,			
Hydric Soil Present?		Yes 🖾		Is the Samp within a We		Yes	□ No	⊠
Wetland Hydrology Pr	esent?	Yes 🗌	No ⊠	***************************************	uuru i			
Remarks: Observe	d hydric soil indicators appear t	o be relict re	doximorphic 1	features. Ac	cording to the Regional Supplement	t to the Corps of	Engineer	s
Wetland	Delineation Manual: Western Mo	ountains. Va	llevs and Coas	st Region, V	/ersion 2.0 (USACOE, 2010), relict fe ved. The parcel in question appears	atures still meet t	the techn	nical
	n of nyaric soil. No current evide ling ditches.	ence of wetta	ina nyarology	was observ	veu. The parcer in question appears	to be enectively		,,
VEGETATION - U	se scientific names of plants	s						
Tree Stratum (Plot siz		Absolute	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1		% Cover	Species?	Status	Number of Dominant Species			
2					That Are OBL, FACW, or FAC:	1		(A)
3					Total Number of Dominant			(D)
4					Species Across All Strata:	1		(B)
50% =, 20% =			= Total Cover		Percent of Dominant Species	100		(A/B)
Sapling/Shrub Stratur	<u>n</u> (Plot size:)				That Are OBL, FACW, or FAC:	<u>100</u>		(//\b)
1					Prevalence Index worksheet:			
2					Total % Cover of:	Multiply	by:	
3					OBL species	x1 =		
4					FACW species	x2 =		
5					FAC species	x3 =		
50% =, 20% =			= Total Cover		FACU species	x4 =		
Herb Stratum (Plot siz	ze: <u>12' dm</u>)				UPL species	x5 =		
1. <u>Ranunculus reper</u>	<u>าร</u>	<u>90</u>	<u>yes</u>	<u>FAC</u>	Column Totals:(A)		(B)
2. Phalaris arundina	<u>cea</u>	<u>5</u>	<u>no</u>	FACW	Prevalence Index	= B/A =		
3. <u>Rubus armeniacu</u>	<u>s</u>	<u>5</u>	<u>no</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators			
4					1 – Rapid Test for Hydrophytic	Vegetation		
5					2 - Dominance Test is >50%			
6		-			☐ 3 - Prevalence Index is ≤3.0 ¹			
7					4 - Morphological Adaptations ¹ data in Remarks or on a ser		ng	
8								
9					5 - Wetland Non-Vascular Plan			
10					Problematic Hydrophytic Veget	ation' (Explain)		
11					Indicators of hydric soil and wetland	hydrology must		
50% = <u>50</u> , 20% = <u>20</u>		<u>100</u>	= Total Cover		be present, unless disturbed or probl			
Woody Vine Stratum	(Plot size:)							
1					Hydrophytic			
2		*******		—	Vegetation Yes		No	
50% =, 20% =			= Total Cover		Present?			
% Bare Ground in He	rb Stratum							
Remarks:								

			%	C	olor (mo	oist) %	Type ¹	Loc ²	Texture		Remarks		
w/ hish ash content	11-15	<u>10YR3/2</u>	100	_					silt loam			,	
content cont		2.5Y6/3	80		7.5YR4/	<u>′6</u> <u>20</u>	<u>C</u>	PL,M	clay loam	Relict redoximo	rphic featur	es	
pe: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. **Jocation: PL=Pore Lining, M=Matrix dric Soil Indicators (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils *: Indicator of Problematic Hydric Soils Parent Material (TF2)				•••					w/ high ash				
Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils*:				_					content				
Indicators (Applicable to all LRRs, unless otherwise noted.)				_									
Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils*:				_					 .				
Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils*:				-				***************************************	 	***************************************			
Indicators (Applicable to all LRRs, unless otherwise noted.)	 pe: C= Cor	 ncentration, D=Dep	letion, R	– :M≔Redu	ced Mat	rix, CS=Covered or	Coated Sand	——— Grains. ² L	ocation: PL=Por	re Lining, M=Matrix			
Histic Epipedon (A2)	dric Soil In	dicators: (Applica	ble to a	ill LRRs,	unless	otherwise noted.)						oils³:	
Black Histic (A3)	Histosol	(A1)				Sandy Redox (S5)		□ 2	cm Muck (A10)			
Depleted Below Dark Surface (A11)	Histic Ep	pipedon (A2)				Stripped Matrix (S	66)		□ F	Red Parent Material	l (TF2)		
Depleted Below Dark Surface (A11)	Black Hi	istic (A3)				Loamy Mucky Mir	neral (F1) (exc	ept MLRA 1)	□ V	ery Shallow Dark \$	Surface (TF	12)	
Thick Dark Surface (A12)	Hydroge	en Sulfide (A4)				Loamy Gleyed Ma	atrix (F2)			Other (Explain in Re	emarks)		
Sandy Mucky Mineral (S1)	Depleted	d Below Dark Surfa	ce (A11)	\boxtimes	Depleted Matrix (I	F3)						
Sandy Gleyed Matrix (S4)	Thick Da	ark Surface (A12)				Redox Dark Surfa	ice (F6)						
Sandy Gleyed Matrix (S4)	Sandy M	Mucky Mineral (S1)				Depleted Dark Su	ırface (F7)						
DROLOGY **Table (A) **Substrate Hydric Soils Present?** **Described Hydric Soil Indicators appear to be relict redoximorphic features. Boundaries are sharp, not diffuse. Features crumble to a powder when touch was tilled in the past which brought deeper layers closer to the surface. No active pore linings were present. According to the Regional Supplement the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Region, Version 2.0 (USACOE; 2010), relict features still meet the technical definition of hydric soil. No current evidence of wetland hydrology was observed. The parcel appears to be effectively drained by surrounding ditches. **DROLOGY** **Table Hydrology Indicators:** **mary Indicators (minimum of one required; check all that apply) **Surface Water (A1)	Sandy G	Gleyed Matrix (S4)				Redox Depression	ns (F8)					1	
Description (Inches):	strictive La	ayer (if present):					1						
DROLOGY tland Hydrology Indicators: Drology Indicators: Surface Water (A1)	e:												
Soil was tilled in the past which brought deeper layers closer to the surface. No active pore linings were present. According to the Regional Supplement the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Region, Version 2.0 (USACOE, 2010), relict features still meet the technical definition of hydric soil. No current evidence of wetland hydrology was observed. The parcel appears to be effectively drained by surrounding ditches. DROLOGY													
Surface Water (A1)					·						· · · · · · · · · · · · · · · · · · ·		
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Let G Observations: Irace Water Present? Yes No Saturation (A1, 2, 4A, and 4B) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (B8) Let Observations: Irace Water Present? Yes No Depth (inches): Luration Present? Yes No Depth (inches): Ves No									orred. The part				
Saturation (A3)	tland Hydr	rology Indicators:		ired; chec	ck all tha	ıt apply)		,					
Water Marks (B1)	tland Hydr mary Indica	rology Indicators: itors (minimum of o		îred; chec			aves (B9)		Secondar	y Indicators (2 or m	nore require		
Sediment Deposits (B2)	tland Hydr mary Indica Surface	rology Indicators: itors (minimum of o Water (A1)		ired; chec		Water-Stained Le	• •		Secondar □ Wat	y Indicators (2 or m er-Stained Leaves	nore require (B9)		
Drift Deposits (B3)	tland Hydr mary Indica Surface High Wa	rology Indicators: tors (minimum of o Water (A1) ater Table (A2)		îred; ched		Water-Stained Le	• •		Secondar □ Wat	y Indicators (2 or m er-Stained Leaves RA 1, 2, 4A, and 4	nore require (B9)		
Algal Mat or Crust (B4)	tland Hydr mary Indica Surface High Wa Saturati	rology Indicators: ttors (minimum of c Water (A1) ater Table (A2) ion (A3)		ired; ched		Water-Stained Le (except MLRA 1, Salt Crust (B11)	2, 4A, and 4E		Secondar Wat (ML	y Indicators (2 or m er-Stained Leaves RA 1, 2, 4A, and 4 inage Patterns (B10	nore require (B9) (B)		
Iron Deposits (B5)	tland Hydr mary Indica Surface High Wa Saturati Water M	rology Indicators: ttors (minimum of o Water (A1) ater Table (A2) ion (A3) Marks (B1)		ired; ched		Water-Stained Le (except MLRA 1, Salt Crust (B11) Aquatic Invertebra	2, 4A, and 4E		Secondar Wat (ML Drai	y Indicators (2 or m er-Stained Leaves RA 1, 2, 4A, and 4 inage Patterns (B10 Season Water Tab	nore require (B9) (B) 0) ole (C2)	d)	
Surface Soil Cracks (B6)	tland Hydr mary Indica Surface High Wa Saturati Water M Sedime	rology Indicators: ttors (minimum of o Water (A1) ater Table (A2) ion (A3) Marks (B1) nt Deposits (B2)		ired; chec	0	Water-Stained Le (except MLRA 1, Salt Crust (B11) Aquatic Invertebra Hydrogen Sulfide	2, 4A, and 4E ates (B13) Odor (C1)	3)	Secondar Wat (ML Drai Dry- Satu	y Indicators (2 or m er-Stained Leaves RA 1, 2, 4A, and 4 inage Patterns (B10 Season Water Tab uration Visible on A	nore require (B9) B) 0) ole (C2) erial Image	d)	
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scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	etland Hydr mary Indica Surface High Wa Saturati Water M Sedime Drift De Algal Ma Iron De Surface Inundati Sparsel eld Observa rface Water ater Table P	rology Indicators: Itors (minimum of or Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca ations: Present? Yesent? Yesent?	al Image ave Surfa	ry (B7) ace (B8)		Water-Stained Le (except MLRA 1, Salt Crust (B11) Aquatic Invertebra Hydrogen Sulfide Oxidized Rhizosp Presence of Redu Recent Iron Redu Stunted or Stresso Other (Explain in I	2, 4A, and 4E ates (B13) Odor (C1) heres along Li uced Iron (C4) ction in Tilled es Plants (D1) Remarks) s):s):	iving Roots (C3 Soils (C6)	Secondar Wat (ML Drai Satu Sha FAC Rais	y Indicators (2 or meter-Stained Leaves RA 1, 2, 4A, and 4 inage Patterns (B10-Season Water Taburation Visible on A omorphic Position (Illow Aquitard (D3) E-Neutral Test (D5) sed Ant Mounds (Dist-Heave Hummock	nore require (B9) (B) 0) ole (C2) derial Image (D2) 6) (LRR A) (s (D7)	d) ry (C9)	
	etland Hydr mary Indica Surface High Wa Saturati Water M Sedime Drift De Algal Ma Iron De Surface Inundati Sparsel eld Observa rface Water ater Table P turation Pre cludes capill	rology Indicators: Itors (minimum of or Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca ations: Present? y Vegent? y Vegetated Y Vegetated	al Image ave Surfa es [es [ry (B7) ace (B8) No No		Water-Stained Le (except MLRA 1, Salt Crust (B11) Aquatic Invertebra Hydrogen Sulfide Oxidized Rhizosp Presence of Redu Recent Iron Redu Stunted or Stress Other (Explain in I	2, 4A, and 4E ates (B13) Odor (C1) heres along Li uced Iron (C4) ction in Tilled es Plants (D1) Remarks) s):s):s):	iving Roots (C3 Soils (C6) (LRR A)	Secondar Wat (ML Drai Satu Sha FAC Rais	y Indicators (2 or meter-Stained Leaves RA 1, 2, 4A, and 4 inage Patterns (B10-Season Water Taburation Visible on A omorphic Position (Illow Aquitard (D3) E-Neutral Test (D5) sed Ant Mounds (Dist-Heave Hummock	nore require (B9) (B) 0) ole (C2) derial Image (D2) 6) (LRR A) (s (D7)	d) ry (C9)	2

Project Site: <u>Hager- 27060200301900</u>			City/Coun	ty: <u>Monroe/Snohomish</u> Sampling Da	ate: <u>10/</u>	14/1 <u>4</u>
Applicant/Owner: Jim Hager				State: WA Sampling Po		
Investigator(s): Mary Harenda & Andrew Wones				Section, Township, Range: 2,27N,6E		
Landform (hillslope, terrace, etc.): River valley		Local	relief (conc	ave, convex, none): none	- Slope (%):	1
Subregion (LRR): A	Lat: 47.8		,		Datum: WGS	84
Soil Map Unit Name: Mapped as Bellingham silt loan	****			NWI classification:	N/A	
Are climatic / hydrologic conditions on the site typical for		rear? Ye	es 🛛	No [] (If no, explain in Remarks.)		
		antly disturbed	_	Normal Circumstances" present?	Yes 🛭	No 🗆
		ly problematic?		eded, explain any answers in Remarks.)		
_ =						
SUMMARY OF FINDINGS – Attach site map sl	nowing san	npling point	locations,	transects, important features, etc.		
Hydrophytic Vegetation Present?	Yes 🛛	No 🗆	la tha Cama	alad Aran		
Hydric Soil Present?	Yes 🔯	No 🗆	Is the Samp within a We		Yes 🗌	No 🛚
Wetland Hydrology Present?	Yes 🛚	No ⊠		and the state of t		
Wetland Delineation Manual: Western M	ountains. Va	llevs and Coa	st Region, \	ccording to the Regional Supplement to the /ersion 2.0 (USACOE, 2010), relict features ved. The parcel in question appears to be e	still meet the	technical
surrounding ditches.						
VEGETATION - Use scientific names of plant	S Absolute	Dominant	Indicator	Γ		
Tree Stratum (Plot size:)	% Cover	Species?	Status	Dominance Test Worksheet:		
1				Number of Dominant Species That Are OBL, FACW, or FAC:	<u>2</u>	(A)
2						
3				Total Number of Dominant Species Across All Strata:	<u>2</u>	(B)
4 50% =, 20% =		= Total Cove		Percent of Dominant Species		
Sapling/Shrub Stratum (Plot size:)		, otal ooto	•	That Are OBL, FACW, or FAC:	<u>100</u>	(A/B)
1				Prevalence Index worksheet:		
2				Total % Cover of:	Multiply by:	
3				OBL species	x1 =	
4				FACW species	x2 =	
5				FAC species	x3 =	
50% =, 20% =		= Total Cove	г	FACU species	x4 =	
Herb Stratum (Plot size: 12' dm)				UPL species	x5 =	
1. Agrostis sp.	<u>50</u>	<u>yes</u>	<u>FAC</u>	Column Totals:(A)	_	(B)
2. Holcus lanatus	<u>47</u>	<u>yes</u>	FAC	Prevalence Index = B/A	=	
3. <u>Medicago lupulina</u>	<u>3</u>	<u>no</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators:		
4. Ranunculus repens	<u>trace</u>	<u>no</u>	FAC	☐ 1 Rapid Test for Hydrophytic Vegeta	ation	
5. <u>Rubus armeniacus</u>	<u>trace</u>	<u>no</u>	<u>FACU</u>			
6. Equisetum arvense	trace	<u>no</u>	FAC	☐ 3 - Prevalence Index is ≤3.0 ¹		
7. <u>Phalaris arundinacea</u>	trace	<u>no</u>	<u>FACW</u>	4 - Morphological Adaptations¹ (Provi		
8. <u>Taraxacum officinale</u>	trace	<u>no</u>	<u>FACU</u>	data in Remarks or on a separate	sheet)	
9. <u>Cirsium arvense</u>	<u>trace</u>	<u>no</u>	FAC	5 - Wetland Non-Vascular Plants		
10				Problematic Hydrophytic Vegetation ¹	(Explain)	
11		***************************************		¹ Indicators of hydric soil and wetland hydrol	logy must	
50% = <u>50</u> , 20% = <u>20</u>	<u>100</u>	= Total Cove	r	be present, unless disturbed or problematic		
Woody Vine Stratum (Plot size:)						
1				Hydrophytic		
2				1 7 7 7	⊠ Ne	· 🗆
50% =, 20% =		= Total Cove	r	Present?		
% Bare Ground in Herb Stratum						
Remarks:						

Soil was tilled in the past which brought deeper layers closer to the surface. No active pore linings were present. According to the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Region, Version 2.0 (USACOE, 2010), relict features still meet the technical definition of hydric soil. No current evidence of wetland hydrology was observed. The parcel appears to be effectively drained by surrounding ditches. Hydrology Metland Hydrology Indicators:								indicato	r or confi	rm the absent	e of indicat	ors.)					
Color (mosts) No. Color (mosts) % Type Loc Texture Remarks	Profile Descr	iption: (Describ	e to the	depth	needed	to do	cument the	maiouto		ini the about							
9.6 10YR3/2 190 7.5YR4/6 20 C PLM disk kam Reict redoximorbic features 5.11 10YR3/2 190 7.5YR4/6 20 C PLM disk kam Reict redoximorbic features 5.11 10YR3/2 190 80 7.5YR4/6-4/16 20 C PLM disk kam Reict redoximorbic features 5.11 10YR3/2 190 80 7.5YR4/6-4/16 20 C PLM disk kam Reict redoximorbic features 5.5YR4/6 80 R	Depth	Matr	x				Re	dox Featu									
8-11 2.5Y8/3 80 7.5YR4/8 20 C P.L.M day loam Relict redoximorphic features 6-11 10YR3/2 100 11-13 2.5Y8/3 80 7.5YR4/4-4/6 20 C P.L.M day loam Relict redoximorphic features 8-11 10YR3/2 100 11-13 2.5Y8/3 80 7.5YR4/4-4/6 20 C P.L.M day loam Relict redoximorphic features 8-11 10YR3/2 100 11-13 2.5Y8/3 80 7.5YR4/4-4/6 20 C P.L.M day loam Relict redoximorphic features 8-12 11-13 2.5Y8/3 80 7.5YR4/4-4/6 20 C P.L.M day loam Relict redoximorphic features 8-12 11-13 2.5Y8/3 80 7.5YR4/4-4/6 20 C P.L.M day loam for redoximorphic features 8-13 11-13 2.5Y8/3 80 7.5YR4/4-4/6 20 C P.L.M day loam for redoximorphic features 8-14 11-13 2.5Y8/3 80 7.5YR4/4-4/6 20 C P.L.M day loam for redoximorphic features 8-15 11-13 2.5Y8/3 80 7.5YR4/4-4/6 20 C P.L.M day loam for redoximorphic features 8-15 11-13 2.5Y8/3 80 7.5YR4/4-4/6 20 C P.L.M day loam for redoximorphic features 8-15 11-13 2.5Y8/3 80 7.5YR4/4-4/6 20 C P.L.M day loam for redoximorphic features 8-16 11-13 2.5Y8/3 80 7.5YR4/4-4/6 20 C P.L.M day loam for redoximorphic features 9-16 11-13 2.5Y8/3 80 7.5YR4/4-4/6 20 C P.L.M day loam for redoximorphic features 9-17 11-13 2.5Y8/3 80 7.5YR4/4-4/6 20 C P.L.M day loam for redoximorphic features 9-18 11-13 2.5Y8/3 80 7.5YR4/4-4/6 20 C P.L.M day loam for redoximorphic features 9-18 11-13 2.5Y8/3 80 7.5YR4/4-4/6 20 C P.L.M day loam for redoximorphic features 9-18 11-13 2.5Y8/3 80 7.5YR4/4-4/6	inches)	Color (moist)		%	Colo	r (mois	st)	<u> </u>	Type ¹	Loc ²	Texture	-			Remarks	·	
Self-1 10/RS/2 100 S.SYR44-4/6 20 C ELM dar loam. Relict redoximorphic features Aand Samon Relict redoximorphic features Samon Self-1 Samon Relict redoximorphic features Samon Self-1 Samon Self-1 Samon Self-1 Samon Self-1 Sel	<u>0-6</u>	10YR3/2	1	00													
11-15 2-5YEGS 80 7.6YR4/4-4/6 20 C PLM clav leam Relict redoximorphic features REDG	<u>6-11</u>		1	80	<u>7.5</u> `	YR4/6	2	0	<u>C</u>	<u>PL, M</u>			Relict re	doximorp	hic featu	res	
Type: C= Concentration, D=Depletion, RMn-Reduced Matrix, CS=Covered or Coated Sand Grains. Tocation: PL=Pore Lining, M=Matrix Type: Cs Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils* Histosc (A1) Sandy Redox (S5) 2 cm Musck (A10) Histosc (A11) Sandy Redox (S5) 2 cm Musck (A10) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Depleted Matrix (F2) Depleted Methor (A2) Depleted Matrix (F2) Other (Explain in Remarks) Depleted Dark Surface (A11) Depleted Dark Surface (F5) Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Indicators of hydrophytic vegetation and wetland Hydrology must be present. Ves No Wetand Hydrology must be present. Wetand Delineation Manual: Mestern Mountains, Valleys and Coast Region, Version 2.0 (VSACOC): 2010, relicit features still the Corps of Engineers Version 2.0 (VSACOC): 2010, relicit features still meet the technical definition of hydric soil. No current evidence of wetland hydrology was observed. The parcel appears to be effectively drained by surrounding ditches. Water Table (A2) Water Table (A2) Water Table (A2) Water Table (A2) Presence (Resp. MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Sediment Deposts (B3) Aguatic Invertebrates (B10) Dry-Season Water Table (C2) Presence of Reduced fron (C4) Presence of Reduced fron (C4) Reduced Soil (RA A) Presence of Reduced fron (C4) Reduced Soil (RA A) Presence of Reduced fron (C4) Reduced Soil (RA A) Relaced Ant Mounds (C6) (LRR A) Invadado Value of Responsible on Aerial Imagery (C9) Surface Valuer (Rable Core (C6) Presence of Reduced fron (C4) Relaced Ant Mounds (C6) (LRR A) Presence of Reduced fron (C4) Relaced Core (C6) Relaced Core (C6) Relaced Core (C6) Relaced Core	<u>6-11</u>		_														
Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ^1_Location: PL=Pore Lining, M=Matrix	<u>11-15</u>	2.5Y6/3	į	<u>80</u>	<u>7.5YF</u>	24/4-4/	<u>/6</u> 2	<u>0</u>	<u>C</u>	PL,M			Relict re	doximorp	hic featu	res	
Indicators: (Applicable to all LRRs, unless otherwise noted.)											sand	<u>i</u>					
Indicators: (Applicable to all LRRs, unless otherwise noted.)												-					
Indicators: (Applicable to all LRRs, unless otherwise noted.)					_		-					-					
Histoc Spide Soli Indicators: (Applicable to all LRRs, unless otherwise noted.)												_ _D	Lining M				
Histosol (A1)				···					ated Sand	Grains.					Uvdeia C	oils ³ :	
Histic Epipedon (A2)	_		licable t	o all L		_									пуанса	ions .	
Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulface (A4) Loamy Gleyed Martix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) Welland Hydrology must be present, unless disturbed or problematic. Note that the past which bought deeper thyser scheme in the past of the surface of the surface. Boundaries are sharp, not diffuse. Features combined to the past which bought deeper thyser scheme in the surface of the surface. Boundaries are sharp, not diffuse. Features combined the surface of the surface. Boundaries are sharp, not diffuse. Features combined the surface of the surface. Boundaries are sharp, not diffuse. Features combined the surface of the surface. Boundaries are sharp, not diffuse. Features combined the surface of the surface. Boundaries are sharp, not diffuse. Features combined the surface of the surface. Boundaries are sharp, not diffuse. Features combined the surface of the surface. Boundaries are sharp, not diffuse. Features are surface. Features combined the surface of the surface. Boundaries are sharp, not diffuse. Features are surface. Features combined the surface of the surface. Boundaries are sharp, not diffuse. Features are surface. Features are surface. Features are surface. Boundaries are sharp, not diffuse. Features are surface. Boundaries are sharp, not diffuse of the surface. Boundaries are sharp, not diffuse the surface. Boundaries are sharp, not diffused to surfac	_						-								TE2)		
Hydrogen Sulfide (A4)									nl (Ed) (av							E12\	
Depleted Below Dark Surface (A11)	_	, ,					•	•		(Cept MLRA 1)			•			F12)	
Thick Dark Surface (A12)		• •		(44)			•	•				Oti	iei (Expie	alli ili i\eii	ilains)		
Sandy Mucky Mineral (S1)				A11)													
Sandy Gleyed Matrix (S4)											3Inc	licators	of hydro	phytic ve	getation	and	
Restrictive Layer (if present):	-					_	•									ıt,	
Page						<u> </u>	Nedox Dej	71 C 3 3 10 113	(1 0)	T		uniess	disturbed	or proble	emauc.		
Peth (inches):		ayer (ii present	<i>)</i> .														
Comparison Com											D			Yes	⋈	No	г
Surface Water (A1)	Remarks	Observed hydric Soil was tilled in the Corps of En meet the technic	the pas gineers ' cal defin	t which Wetlan	n brought d Delinea	deepe ation M	er layers clo //anual: We	ser to the stern Mour	surface. I ntains, Va	oundaries are s No active pore Illeys and Coas	harp, not dif linings were st Region, Ve	preser	nt. Accord 2.0 (USA)	rumble to ling to the COE, 201	Regiona 0), relict	al Supple: features :	ment : still
Surface Water (A1)	Remarks:	Observed hydric Soil was tilled in the Corps of En meet the technic surrounding dito	the pas gineers to cal defin thes.	t which Wetlan	n brought d Delinea	deepe ation M	er layers clo //anual: We	ser to the stern Mour	surface. I ntains, Va	oundaries are s No active pore Illeys and Coas	harp, not dif linings were st Region, Ve	preser	nt. Accord 2.0 (USA)	rumble to ling to the COE, 201	Regiona 0), relict	al Supple: features :	ment : still
High Water Table (A2)	Remarks: HYDROLOG Wetland Hyd	Observed hydric Soil was tilled in the Corps of En meet the technic surrounding dito	the pas gineers to cal definithes.	t which Wetlan ition of	n brought d Delinea hydric so	deepe ation M oil. No	er layers clo Manual: We current evid	ser to the stern Mour	surface. I ntains, Va	oundaries are s No active pore Illeys and Coas	harp, not dif linings were at Region, Ve oserved. The	preser rsion 2 parce	nt. Accord 2.0 (USA0 1 appears	crumble to ling to the COE, 201 to be effe	Regiona 0), relict ectively o	al Supplei features Irained by	ment : still
Saturation (A3)	Remarks: HYDROLO Wetland Hyd Primary Indic	Observed hydric Soil was tilled in the Corps of En meet the technic surrounding ditc	the pas gineers to cal definithes.	t which Wetlan ition of	n brought id Delinea hydric so i; check a	deepe ation M pil. No	er layers clo Manual: We current evid	ser to the stern Mour dence of w	surface. I ntains, Va retland hy	oundaries are s No active pore Illeys and Coas	sharp, not diff linings were st Region, Ve oserved. The	preser rsion 2 parce	nt. Accord 2.0 (USA) I appears	crumble to ling to the COE, 201 to be effe	e Regiona 0), relict ectively of	al Supplei features Irained by	ment : still
Water Marks (B1)	HYDROLOG Vetland Hyd Primary Indica	Observed hydric Soil was tilled in the Corps of En meet the technic surrounding ditc	the pas gineers to cal definithes.	t which Wetlan ition of	n brought id Delinea hydric so i; check a	deepe ation M pil. No	er layers clo //anual: We- current evid apply)	ser to the stern Mour lence of w	surface. I ntains, Va retland hy	oundaries are s No active pore illeys and Coas drology was ob	sharp, not diff linings were st Region, Ve oserved. The	preser ersion 2 parce mdary Wate	t. Accord 2.0 (USA) I appears Indicators	orumble to ling to the COE, 201 to be effe	Regiona 0), relict ectively control ore require B9)	al Supplei features Irained by	ment : still
Sediment Deposits (B2)	HYDROLOG Vetland Hyd Primary Indic. Surface High W	Observed hydric Soil was tilled in the Corps of En meet the technic surrounding ditc. GY Irology Indicator ators (minimum e Water (A1)	the pas gineers to cal definithes.	t which Wetlan ition of	n brought id Delinea hydric so i; check a	deepe ation M bil. No	apply) Water-Sta	ser to the stern Mount dence of w	surface. I ntains, Va retland hy	oundaries are s No active pore illeys and Coas drology was ob	sharp, not dif- linings were st Region, Ve sserved. The	presersion 2 parce indary Wate (MLR	Indicators r-Stained A 1, 2, 44	orumble to ling to the COE, 201 to be effe s (2 or mo Leaves (I	Regiona 0), relict ectively c pre requir B9)	al Supplei features Irained by	ment : still
Drift Deposits (B3)	HYDROLOG Vetland Hyd Primary Indic. Surface High W	Observed hydric Soil was tilled in the Corps of En meet the technic surrounding dito. GY Irology Indicato ators (minimum e Water (A1) Vater Table (A2) tion (A3)	the pas gineers to cal definithes.	t which Wetlan ition of	n brought id Delinea hydric so i; check a	deepe ation M oil. No	apply) Water-Sta (except M Salt Crust	ned Leave LRA 1, 2, (B11)	surface. Intains, Va retland hy	oundaries are s No active pore illeys and Coas drology was ob	sharp, not difilinings were st Region, Verseved. The	ndary Wate (MLR	Indicators r-Stained A 1, 2, 4/	orumble to ling to the COE, 201 to be effe s (2 or mo Leaves (I Leaves (B10)	Regiona 0), relict ectively c pore requir B9)	al Supplei features Irained by	ment : still
Algal Mat or Crust (B4)	HYDROLOG Vetland Hyd Primary Indication High Water Water	Observed hydric Soil was tilled in the Corps of En meet the technic surrounding dita. GY Irology Indicator ators (minimum e Water (A1) Vater Table (A2) tion (A3) Marks (B1)	the pas gineers sal defin hes.	t which Wetlan ition of	n brought id Delinea hydric so i; check a	all that	apply) Water-Sta (except M Salt Crust Aquatic In	ned Leave LRA 1, 2, (B11)	surface. Intains, Varetland hy	oundaries are s No active pore illeys and Coas drology was ob	sharp, not difilinings were st Region, Verserved. The	endary Wate (MLR Drain	Indicators Indicators r-Stained A 1, 2, 4/ age Patte	s (2 or mc Leaves (IA, and 4E erns (B10)	Regiona O), relict ectively co ore require B9) 3)) e (C2)	al Supple features irained by ed)	ment : still
Iron Deposits (B5)	HYDROLOG Vetland Hyd Primary Indica Griffact Gri	Observed hydric Soil was tilled in the Corps of En meet the technic surrounding dita. GY Irology Indicator ators (minimum e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)	the pas gineers sal defin hes.	t which Wetlan ition of	n brought id Delinea hydric so i; check a	all that	apply) Water-Sta (except M Salt Crust Aquatic In-	ned Leave LRA 1, 2, (B11) vertebrates	surface. Intains, Varetland hy ess (B9) 4A, and 4 ss (B13) dor (C1)	undaries are s No active pore alleys and Coas drology was of	sharp, not difilinings were st Region, Veoserved. The	ndary Wate (MLR Drain Dry-S Satur	Indicators	s (2 or mc Leaves (IA, and 4E erms (B10) sater Table	Regiona O), relict ectively co ore requir B9) 3)) e (C2) rial Imag	al Supple features irained by ed)	ment : still
Surface Soil Cracks (B6)	HYDROLOG Vetland Hyd rimary Indic: High W Satura Water Sedime	Observed hydric Soil was tilled in the Corps of En meet the technic surrounding dita surrounding surroundin	the pas gineers local defin hes. rs: of one re	t which Wetlan ition of	n brought id Delinea hydric so i; check a	all that a	apply) Water-Sta (except M Salt Crust Aquatic In-	ned Leave LRA 1, 2, (B11) vertebrates Sulfide Oc	surface. Intains, Varettand hy ess (B9) 4A, and 4 ss (B13) dor (C1) res along	Dundaries are s No active pore alleys and Coas drology was of	sharp, not difilinings were st Region, Veoserved. The	endary Wate (MLR Drain Dry-S Satur Georr	Indicators	s (2 or mo Leaves (IA, and 4E erns (B10) ater Table ble on Ae osition (D	Regiona O), relict ectively co ore requir B9) 3)) e (C2) rial Imag	al Supple features irained by ed)	ment : still
Inundation Visible on Aerial Imagery (B7)	HYDROLOG Vetland Hyd Surface High W Satura Water Sedime	Observed hydric Soil was tilled in the Corps of En meet the technic surrounding ditc. GY Irology Indicato ators (minimum e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4)	the pas gineers local defin hes. rs: of one re	t which Wetlan ition of	n brought id Delinea hydric so i; check a	all that a	apply) Water-Sta (except M Salt Crust Aquatic Int Hydrogen Oxidized F Presence	ned Leave LRA 1, 2, (B11) vertebrate: Sulfide Oc chizospher	surface. Intains, Varettand hy ess (B9) 4A, and 4 ss (B13) dor (C1) res along d Iron (C4)	Dundaries are s No active pore alleys and Coas drology was of	sharp, not difilinings were st Region, Veoserved. The	ndary Wate (MLR Drain Dry-S Satur Geom	Indicators	s (2 or mo Leaves (I A, and 4E erns (B10) stater Table ble on Ae cosition (D ard (D3)	Regiona O), relict ectively co ore requir B9) 3)) e (C2) rial Imag	al Supple features irained by ed)	ment : still
Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No Depth (inches): Nater Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Secribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	HYDROLOG Wetland Hyd Primary Indic: High W Satura Water Water Sedime Drift De Algal M	Observed hydric Soil was tilled in the Corps of En meet the technic surrounding dita surrou	the pas gineers vical defin hes.	t which Wetlan ition of	n brought id Delinea hydric so i; check a	deepe deation M No	apply) water-Sta (except M Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro	ned Leave LRA 1, 2, (B11) vertebrate: Sulfide Oc chizospher of Reduce in Reduction	surface. Intains, Varettand hy es (B9) 4A, and 4 s (B13) dor (C1) res along d Iron (C4 on in Tiller	Journaires are s No active pore Alleys and Coas Adrology was of AB) Living Roots (CA) d Soils (CA)	sharp, not difilinings were st Region, Veoserved. The	ndary Wate (MLR Drain Dry-S Satur Geom	Indicators	s (2 or mo Leaves (I A, and 4E erns (B10) ater Table ble on Ae osition (D urd (D3) est (D5)	e Regiona O), relict ectively contents pre requir B9) B) e (C2) erial Imag 2)	al Supple features rained by ed)	ment : still
Field Observations: Surface Water Present? Yes No Depth (inches): Nater Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	HYDROLOG Wetland Hyd Primary Indic. High W Satura Water Sedime Drift De Algal M Iron De	Observed hydric Soil was tilled in the Corps of En meet the technic surrounding dito. GY Irology Indicator ators (minimum e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6)	the pas gineers to cal defin thes. rs: of one re	t which Wetlan of	n brought d Deliner hydric so	deepe deation M No	apply) water-Sta (except M Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or	ned Leave LRA 1, 2, (B11) vertebrate: Sulfide Oc hizosphei of Reduce n Reductic Stresses	es (B9) 4A, and 4 s (B13) dor (C1) res along d Iron (C4 on in Tiller Plants (D	Journaires are s No active pore Alleys and Coas Adrology was of AB) Living Roots (CA) d Soils (CA)	Secondary Control of the Control of	ndary Wate (MLR Drain Dry-S Satur Geom Shalld FAC- Raise	Indicators Indicators -Stained A 1, 2, 4/ age Patte eason W ation Visi norphic Po bw Aquita Neutral To d Ant Mo	s (2 or mc Leaves (I Leaves (I Do A, and 4E erns (B10) ater Table ble on Ae osition (D ord (D3) est (D5)	Pregiona (2) (Pregional Pregional Pr	al Supple features rained by ed)	ment : still
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Nater Table Present? Yes □ No ☒ Depth (inches): Saturation Present? Yes □ No ☒ Depth (inches):	HYDROLOO Wetland Hyd Primary Indica High W Satura Water Sedime Drift De Algal M Iron De Surface Inunda	Observed hydric Soil was tilled in the Corps of En meet the technic surrounding dita surrounding sur	the pas gineers to cal defin hes. rs: of one re)	t which Wetlan of which we determine the work of the wedge of the wedg	n brought d Deliner hydric so i; check a	deepe deation M No	apply) water-Sta (except M Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or	ned Leave LRA 1, 2, (B11) vertebrate: Sulfide Oc hizosphei of Reduce n Reductic Stresses	es (B9) 4A, and 4 s (B13) dor (C1) res along d Iron (C4 on in Tiller Plants (D	Journaires are s No active pore Alleys and Coas Adrology was of AB) Living Roots (CA) d Soils (CA)	sharp, not difilinings were st Region, Verseved. The	ndary Wate (MLR Drain Dry-S Satur Geom Shalld FAC- Raise	Indicators Indicators -Stained A 1, 2, 4/ age Patte eason W ation Visi norphic Po bw Aquita Neutral To d Ant Mo	s (2 or mc Leaves (I Leaves (I Do A, and 4E erns (B10) ater Table ble on Ae osition (D ord (D3) est (D5)	Pregiona (2) (Pregional Pregional Pr	al Supple features rained by ed)	ment : still
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	HYDROLOG Wetland Hyd Primary Indice High W Satura Water Sedime Drift De Algal M Iron De Surface Inunda Sparse Field Observ	Cobserved hydric Soil was tilled in the Corps of En meet the technic surrounding dita surro	the pas gineers in the seal definition of the	t which Wetlan of wetland it would be well as	brought d Deliner hydric so i; check a	all that :	apply) Water-Sta (except M Salt Crust Aquatic In- Hydrogen Oxidized F Presence Recent Iro Stunted or	ned Leave LRA 1, 2, (B11) vertebrate: Sulfide Oc chizospher of Reduce n Reduction Stresses	es (B9) 4A, and 4 s (B13) dor (C1) res along d Iron (C4 on in Tiller Plants (D	Journaires are s No active pore Alleys and Coas Adrology was of AB) Living Roots (CA) d Soils (CA)	sharp, not difilinings were st Region, Verseved. The	ndary Wate (MLR Drain Dry-S Satur Geom Shalld FAC- Raise	Indicators Indicators -Stained A 1, 2, 4/ age Patte eason W ation Visi norphic Po bw Aquita Neutral To d Ant Mo	s (2 or mc Leaves (I Leaves (I Do A, and 4E erns (B10) ater Table ble on Ae osition (D ord (D3) est (D5)	Pregiona (2) (Pregional Pregional Pr	al Supple features rained by ed)	ment : still
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	HYDROLOG Wetland Hyd Primary Indic: High W Satura Water Sedime Drift De Surface Iron De Surface Inunda Sparse Field Observ Surface Water	Cobserved hydric Soil was tilled in the Corps of En meet the technic surrounding dita surrounding su	the pas gineers in the seal definition of the	t which Wetlan of which we would be with the work of t	B7) (B8)	deepe ation No	apply) water-Sta (except M Salt Crust Aquatic In- Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ned Leave LRA 1, 2, (B11) vertebrate: Sulfide Oc chizospher of Reduce n Reductio Stresses Idain in Re-	es (B9) 4A, and 4 s (B13) dor (C1) res along d Iron (C4 on in Tiller Plants (D	Journaires are s No active pore Alleys and Coas Adrology was of AB) Living Roots (CA) d Soils (CA)	sharp, not difilinings were st Region, Verseved. The	ndary Wate (MLR Drain Dry-S Satur Geom Shalld FAC- Raise	Indicators Indicators -Stained A 1, 2, 4/ age Patte eason W ation Visi norphic Po bw Aquita Neutral To d Ant Mo	s (2 or mo Leaves (I A, and 4E erns (B10) ater Table ble on Ae osition (D ord (D3) est (D5)	Pregiona (2) (Pregional Pregional Pr	al Supple features rained by ed)	ment : still
	HYDROLOG Wetland Hyd Primary Indication High Water Sedimor Orift Do Iron De Surface Inunda Sparse Field Observ Surface Water Water Table I	Observed hydric Soil was tilled in the Corps of En meet the technic surrounding dita surrou	the pas gineers in the seal definition of the	t which Wetlan of which we would be with the work of t	B7) (B8)	deepe ation No	apply) water-Sta (except M Salt Crust Aquatic In- Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ned Leave LRA 1, 2, (B11) vertebrate: Sulfide Oc chizospher of Reduce n Reductio Stresses Idain in Re-	es (B9) 4A, and 4 s (B13) dor (C1) res along d Iron (C4 on in Tiller Plants (D	Dundaries are s No active pore Alleys and Coas Adrology was of AB) Living Roots (CA) d Soils (C6) 1) (LRR A)	sharp, not difilinings were st Region, Verserved. The	ndary Wate (MLR Drain Dry-S Satur Geom Shalld FAC- Raise Frost-	Indicators Indicators -Stained A 1, 2, 4/ age Patte Leason W Lation Visit Lorphic Pro Low Aquita Neutral Tod Ant Mo Heave H	s (2 or mo Leaves (I A, and 4E erns (B10) ater Table ble on Ae osition (D ard (D3) est (D5) unds (D6 ummocks	Pregiona (2) (Pregional Pregional Pr	ed)	ment tstill
	HYDROLOG Wetland Hyd Primary Indic: High W Satura Water Sedime Sedime Iron De Surface Inunda Sparse Field Observ Surface Water Vater Table I	Cobserved hydric Soil was tilled in the Corps of En meet the technic surrounding dita surrounding surr	rs: of one re incave S Yes Yes Yes	agery (I	B7) (B8) No No	deepe ation No	apply) water-Sta (except M Salt Crust Aquatic In- Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ned Leave LRA 1, 2, (B11) vertebrate: Sulfide Oc chizospher of Reduce n Reductio Stresses Idain in Re- (inches): (inches):	es (B9) 4A, and 4 s (B13) dor (C1) res along d Iron (C4 pon in Tiller Plants (D marks)	Dundaries are s No active pore alleys and Coas drology was of 4B) Living Roots (C4) d Soils (C6) 1) (LRR A)	Second Carlon Control of the Control	ndary Wate (MLR Drain Dry-S Satur Geom Shalld FAC- Raise Frost-	Indicators Indicators -Stained A 1, 2, 4/ age Patte Leason W Lation Visit Lorphic Pro Low Aquita Neutral Tod Ant Mo Heave H	s (2 or mo Leaves (I A, and 4E erns (B10) ater Table ble on Ae osition (D ard (D3) est (D5) unds (D6 ummocks	e Regiona O), relict ectively control ore requir B9) (a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	ed)	ment tstill
	HYDROLOG Wetland Hyd Primary Indic: Surface High W Satura Water Sedime Iron De Surface Inunda Sparse Field Observ Surface Water Water Table I Saturation Preincludes cap	Cobserved hydric Soil was tilled in the Corps of En meet the technic surrounding dita surrounding surr	rs: of one re incave S Yes Yes Yes	agery (I	B7) (B8) No No	deepe ation No	apply) water-Sta (except M Salt Crust Aquatic In- Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ned Leave LRA 1, 2, (B11) vertebrate: Sulfide Oc chizospher of Reduce n Reductio Stresses Idain in Re- (inches): (inches):	es (B9) 4A, and 4 s (B13) dor (C1) res along d Iron (C4 pon in Tiller Plants (D marks)	Dundaries are s No active pore alleys and Coas drology was of 4B) Living Roots (C4) d Soils (C6) 1) (LRR A)	Second Carlon Control of the Control	ndary Wate (MLR Drain Dry-S Satur Geom Shalld FAC- Raise Frost-	Indicators Indicators -Stained A 1, 2, 4/ age Patte Leason W Lation Visit Lorphic Pro Low Aquita Neutral Tod Ant Mo Heave H	s (2 or mo Leaves (I A, and 4E erns (B10) ater Table ble on Ae osition (D ard (D3) est (D5) unds (D6 ummocks	e Regiona O), relict ectively control ore requir B9) (a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	ed)	ment tstill
	HYDROLOG Vetland Hyd Primary Indication Surface High W Satura Vater Sedime Iron De Surface Inunda Surface Inunda Sparse Guide Observ Surface Water Vater Table I Saturation Princludes cap	Observed hydric Soil was tilled in the Corps of En meet the technic surrounding dita surroundin dita surrounding dita surrounding dita surrounding dita surroun	rs: of one re yes Yes Yes am gaus	agery (I	B7) (B8) No No nitoring w	all that:	apply) water-Sta (except M Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ned Leave LRA 1, 2, (B11) vertebrate: Sulfide Oct chizospher of Reduce n Reductic Stresses dain in Re (inches): (inches):	es (B9) 4A, and 4 s (B13) dor (C1) res along d Iron (C2 on in Tiller Plants (D marks)	Dundaries are s No active pore alleys and Coas drology was of the coast of the coast drology was	Secondary, not diffusings were st Region, Vebserved. The	ndary Wate (MLR Drain Dry-S Satur Geom Shalld FAC- Raise Frost-	Indicators	s (2 or mo Leaves (I A, and 4E erns (B10) ater Table ble on Ae osition (D ard (D3) est (D5) unds (D6	Pregional Regional Re	ery (C9)	ment still /

Project Site: Hager- 27060200301900			City/Coun	nty: <u>Monroe/Snohomish</u> Sampling D)ate: 10/	/14/14
Applicant/Owner: Jim Hager			,	State: WA Sampling P		
Investigator(s): Mary Harenda & Andrew Wones				Section, Township, Range: 2,27N,6		
Landform (hillslope, terrace, etc.): River valley	•	Local	I relief (conc	ave, convex, none): none	 Slope (%):	: 1
Subregion (LRR): A	Lat: 47.8		(Datum: WGS	
Soil Map Unit Name: Mapped as Bellingham silt loar				NWI classification:	N/A	
Are climatic / hydrologic conditions on the site typical for	_	rear? Ye	es 🛛	No [] (If no, explain in Remarks.)	-	
Are Vegetation □, Soil ☒, or Hydrology		antly disturbed	_	Normal Circumstances" present?	Yes ⊠	No 🗆
Are Vegetation , Soil , or Hydrology		ly problematic?		eeded, explain any answers in Remarks.)		_
Are vegetation [2], Soil [2], Striydrology		iy problematio.	(1) 110	ouse, supramy any anistrons in resimence,		
SUMMARY OF FINDINGS – Attach site map sl	nowing sar	npling point	locations,	, transects, important features, etc.		
Hydrophytic Vegetation Present?	Yes ⊠	No 🗆				
Hydric Soil Present?	Yes 🖾		Is the Samp within a We		Yes 🗌	No ⊠
Wetland Hydrology Present?	Yes 🗆	No ⊠				
Wetland Delineation Manual: Western M	ountains, Va	lleys and Coa	st Region, \	ccording to the Regional Supplement to the Version 2.0 (USACOE, 2010), relict features wed. The parcel in question appears to be	s still meet the	e technical
VEGETATION – Use scientific names of plant	s					
Tree Stratum (Plot size:)	Absolute	Dominant	Indicator	Dominance Test Worksheet:		
1	% Cover	Species?	<u>Status</u>	Number of Dominant Species		
2				Number of Dominant Species That Are OBL, FACW, or FAC:	<u>2</u>	(A)
3				Total Number of Dominant	2	(B)
4				Species Across All Strata:	<u>2</u>	(13)
50% =, 20% =		= Total Cove	r	Percent of Dominant Species	100	(A/B)
Sapling/Shrub Stratum (Plot size:)				That Are OBL, FACW, or FAC:		
1				Prevalence Index worksheet: Total % Cover of:	Multiply by:	
2				OBL species	x1 =	<u>-</u>
3				FACW species	x2 =	
4		****		FAC species	x3 =	
5		= Total Cove	- 	FACU species	x4 =	-
50% =, 20% =		- Total Cove	•	UPL species	x5 =	WALKER THE STATE OF THE STATE O
Herb Stratum (Plot size: 12' dm)	45		EAC		X0	(B)
1. Agrostis sp.	<u>45</u>	<u>yes</u>	FAC	Column Totals: (A)		(D)
2. <u>Holcus lanatus</u>	<u>40</u>	<u>yes</u>	FAC	Prevalence Index = B/A	.=	
3. <u>Juncus effusus</u>	<u>10</u>	<u>no</u>	FACW	Hydrophytic Vegetation Indicators:	4-45	
4. Phalaris arundinacea	<u>5</u>	<u>no</u>	<u>FACW</u>	1 - Rapid Test for Hydrophytic Veget	tation	
5						
6				U 3 - Prevalence Index is ≤3.01		
7	-			4 - Morphological Adaptations ¹ (Providata in Remarks or on a separate		
8					Silect)	
9				5 - Wetland Non-Vascular Plants		
10				☐ Problematic Hydrophytic Vegetation ¹	(Explain)	
11				¹ Indicators of hydric soil and wetland hydro	ology must	
50% = <u>50</u> , 20% = <u>20</u>	<u>100</u>	= Total Cove	r	be present, unless disturbed or problematic		
Woody Vine Stratum (Plot size:)						
1				Hydrophytic		
2				Hydrophytic Vegetation Yes	⊠ N∈	• 🗆
50% =, 20% =		= Total Cove	r	Present?		
% Bare Ground in Herb Stratum						
Remarks:						

See 10YR3/2 100	Redox Features	Depth	Depth Matrix Redox Features Type Loc Texture Remarks
Color (moist)	Color (moist)	Color (moist) % Color (moist) % Type Loc Texture Remarks	Color (moist)
Silt boarn Sil	Salt loam Salt	9-6 10YR3/2 100	0-6 10YR3/Z 100
Sea 2.576/3 80 7.57R4/6 20 C PL, M clav loam Relict redoximorphic features 8it loam 8it loam Relict redoximorphic features 8it loam Relict Region 8it loam Relict redoximorphic features 8it loam Relict Region 8it loam Relict redoximorphic features 8it loam Relict Region 8it loam Relict Relict Relict Relict Relict Relict Reli	20 T.5YR4/4-1/6 20 C PLM clay loam Relict redoximorphic features 50 7.5YR4/4-4/6 50 C PLM clay loam. Relict redoximorphic features Sand Sand S	See 2,5Y6/3 50 7,5YR4/6 20 C PLM sit loarn Relict redoximorphic features	Seek 2,5 Ye/3 80 7,5 YR4/6 20 C PL M clay loam Relict redoximorphic features
silt.loam 8-12 2.5Y6/3 50 7.5YR4/4-4/6 50 C PLM clay loam, Relict redoximorphic features 9-12 2.5Y6/3 50 7.5YR4/4-4/6 50 C PLM clay loam, Relict redoximorphic features 9-12 2.5Y6/3 50 7.5YR4/4-4/6 50 C PLM clay loam, Relict redoximorphic features 9-12 2.5Y6/3 50 7.5YR4/4-4/6 50 C PLM clay loam, Relict redoximorphic features 9-12 3.5Y6/3 50 7.5YR4/4-4/6 50 C PLM clay loam, Relict redoximorphic features 9-12 3.5Y6/3 50 7.5YR4/4-4/6 50 C PLM clay loam, Relict redoximorphic features 9-12 3.5Y6/3 50 7.5YR4/4-4/6 50 C PLM clay loam, Relict redoximorphic features 9-12 5.5Y6/3 50 7.5YR4/4-4/6 50 C PLM clay loam, Relict redoximorphic features 9-12 5.5Y6/3 50 7.5YR4/4-4/6 50 C PLM clay loam, Relict redoximorphic features 9-12 5.5Y6/3 50 7.5YR4/4-4/6 50 C PLM clay loam, Relict redoximorphic features 9-12 5.5Y6/3 50 7.5YR4/4-4/6 50 C PLM clay loam, Relict redoximorphic features 9-12 5.5Y6/3 50 7.5YR4/4-4/6 50 C PLM clay loam, Relict redoximorphic features 9-12 5.5Y6/3 50 7.5YR4/4-4/6 50 C PLM clay loam, Relict redoximorphic features 9-12 5.5Y6/3 50 7.5YR4/4-4/6 50 C PLM clay loam, Relict redoximorphic features 9-12 5.5Y6/3 50 7.5YR4/4-4/6 50 C PLM clay loam, Relict redoximorphic features 9-12 5.5Y6/3 50 7.5YR4/4-4/6 50 C PLM clay loam, Relict redoximorphic features 9-12 5.5Y6/3 50 7.5YR4/4-4/6 50 C PLM clay loam, Relict redoximorphic features 9-12 5.5Y6/3 50 7.5YR4/4-4/6 50 C PLM clay loam, Relict redoximorphic features 9-12 5.5Y6/3 50 7.5YR4/4-4/6 50 C PLM clay loam, Relict redoximorphic features 9-12 5.5Y6/3 50 7.5YR4/4-4/6 50 C PLM clay loam, Relict redoximorphic features 9-12 5.5YR4/5 50 7.5YR4/4-4/6 50 C PLM clay loam, Relict redoximorphic features 9-12 5.5YR4/5 50 7.5YR4/5 50 7	Silt loam Silt loam Relict redoximorphic features Sand Sand Grains Sand Sand Grains Sand Sand Grains Sand Sand Grains S	Set 10YR3/2 100	6-8 10YR3/2 100
## Surface (A12) Depleted Matrix (F3) Dep	Sand Sa	### Spin	8-12 2.5Y6/3 50 7.5YR4/4-4/6 50 C PL.M clay loam. Relict redoximorphic features Sand
ype: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1)	Sand	yoje: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Coation: PL=Pore Lining, M=Matrix Coation:	Sand Sand
Sype: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. \$^2\$Location: PL=Pore Lining, M=Matrix \$^3\$Vertic Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils \$^3\$: Histosol (A1) Sandy Redox (S5) 2 cm Muck (A10) Histosol (A2) Stripped Matrix (S6) Red Parent Material (TF2) Red Parent Material (TF2) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) \$^3\$Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Present (Inches): Present (Inches): Hydric Soils Present? Yes	An RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Reduced Matrix, CS=Covered or Coated Sand Grains. Coall LRRs, unless otherwise noted. Indicators for Problematic Hydric Soils 3: Sandy Redox (S5)	ype: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Coated Sand Grains C	Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 2 Location: PL=Pore Lining, M=Matrix 2 Location: PL=Pore Lining, M=Matrix 3 Indicators: (Applicable to all LRRs, unless otherwise noted.) 3 Histosol (A1) 4 Histosol (A2) 5 Histic Epipedon (A2) 5 Histic Epipedon (A2) 6 Black Histic (A3) 7 Loamy Mucky Mineral (F1) (except MLRA 1) 7 Loamy Sulfide (A4) 8 Depleted Below Dark Surface (A11) 9 Depleted Below Dark Surface (A11) 9 Depleted Below Dark Surface (A12) 9 Thick Dark Surface (A12) 9 Sandy Mucky Mineral (S1) 9 Sandy Mucky Mineral (S1) 9 Sandy Gleyed Matrix (S4) 9 Redox Depressions (F8) 1 Redox Depressions (F8) 1 Plydric Soils Present? 1 Plydric Soils Present? 1 Plydric Soils Present? 1 Plydric Soil was tilled in the past which brought deeper layers closer to the surface. No active pore linings were present. According to the Regional Supplement to the Corns of Engineers Weltand Delineation Manual; Western Mountains, Valleys and Coast Region, Version 2.0 (USACOE, 2019), relicit features still
ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1)	Indicators for Problematic Hydric Soils ³ : Sandy Redox (S5)	ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils Histosol (A1)	ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1)
ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1)	Indicators for Problematic Hydric Soils ³ : Sandy Redox (S5)	ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils ³ : Histosol (A1)	ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1)
ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1)	Indicators for Problematic Hydric Soils ³ : Sandy Redox (S5)	Indicators (Applicable to all LRRs, unless otherwise noted.)	ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1)
ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1)	Indicators for Problematic Hydric Soils ³ : Sandy Redox (S5)	Indicators (Applicable to all LRRs, unless otherwise noted.)	ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1)
Histosol (A1)	Sandy Redox (S5)	Histosol (A1)	Histosol (A1)
Histic Epipedon (A2)	Stripped Matrix (56)	Histic Epipedon (A2)	Histic Epipedon (A2)
Black Histic (A3)	Loamy Mucky Mineral (F1) (except MLRA 1)	Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Bellow Dark Surface (A12) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Redox Dark Surface (F7) Redox Depressions (F8) Redox Depressions (F8	Black Histic (A3)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Hydrogen Sulfide (A4)	Hydrogen Sulfide (A4)
Depleted Below Dark Surface (A11)	Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Hydric Soils Present? Yes No Depleted to a powder when toucher which brought deeper layers closer to the surface. No active pore linings were present. According to the Regional Supplement to Wetland Delineation Manual: Western Mountains, Valleys and Coast Region, Version 2.0 (USACOE, 2010), relict features still lition of hydric soil. No current evidence of wetland hydrology was observed. The parcel appears to be effectively drained by Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Dry-Season Water Table (C2)	Depleted Below Dark Surface (A11)	Depleted Below Dark Surface (A11) Depleted Matrix (F3) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Redox Depressions (F8) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Bestrictive Layer (if present): Weepth (inches): Hydric Soils Present? Westland hydrology must be present, unless disturbed or problematic. Hydric Soils Present? Yes No Soil was tilled in the past which brought deeper layers closer to the surface. No active pore linings were present. According to the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Region, Version 2.0 (USACOE, 2010), relict features still
Thick Dark Surface (A12)	Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Hydric Soils Present? Hydric Soils Present? Yes No Depleted Dark Surface (F7) Redox Depressions (F8) Hydric Soils Present? Hydric Soils Present? Yes No Depleted Dark Surface (F7) No Depleted Dark Surface (F6) Redox Depressions (F8) Hydric Soils Present? Yes No Deplete (Soils Present) No De	Thick Dark Surface (A12)	Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, unless disturbed or problematic. Particitive Layer (if present): Imperiment (inches): Hydric Soils Present? Yes No Depressions (F8) Observed hydric soil indicators appear to be relict redoximorphic features. Boundaries are sharp, not diffuse. Features crumble to a powder when toucher Soil was tilled in the past which brought deeper layers closer to the surface. No active pore linings were present. According to the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Region, Version 2.0 (USACOE, 2010), relict features still
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7) Redox Depressions (F8) Redox Depressi	Sandy Mucky Mineral (S1)	Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Unless disturbed or problematic. Pestrictive Layer (if present): Permarks: Observed hydric soil indicators appear to be relict redoximorphic features. Boundaries are sharp, not diffuse. Features crumble to a powder when touched Soil was tilled in the past which brought deeper layers closer to the surface. No active pore linings were present. According to the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Region, Version 2.0 (USACOE, 2010), relict features still
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Appendix (inches):	Secondary Indicators (2 or more required)	PyDROLOGY Python Company Comp	epth (inches): Hydric Soils Present? Yes No Observed hydric soil indicators appear to be relict redoximorphic features. Boundaries are sharp, not diffuse. Features crumble to a powder when toucher Soil was tilled in the past which brought deeper layers closer to the surface. No active pore linings were present. According to the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Region, Version 2.0 (USACOE, 2010), relict features still
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Secondary Indicators (minimum of one required; check all that apply) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)	□ Water-Stained Leaves (B9) □ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) (MLRA 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Drainage Patterns (B10) □ Aquatic Invertebrates (B13) □ Dry-Season Water Table (C2)	Secondary Indicators (2 or more required) Surface Water (A1)	
Surface Water (A1)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)	Surface Water (A1)	
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Water Marks (B1)	Aquatic Invertebrates (B13) Dry-Season Water Table (C2)	Water Marks (B1)	7
		Sediment Deposits (B2)	
Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation visible on Aerial imagery (C-	1 Hydroden Suitide Odor (CT) IT Saturation visible on Aerial infadery (C3)	Drift Deposits (B3)	Saturation (A3) Salt Crust (B11) Drainage Patterns (B10)
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	☐ Presence of Reduced Iron (C4) ☐ Shallow Aquitard (D3) ☐ Recent Iron Reduction in Tilled Soils (C6) ☐ FAC-Neutral Test (D5)	7 January 1985 And Angel Imperent (D7) D Other (Evolein in Remarks) L Frest-Heave Hummocks (D7)	Saturation (A3) Salt Crust (B11) Drainage Patterns (B10) Water Marks (B1) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) FAC-Neutral Test (D5)
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		Iron Deposits (B5)	Saturation (A3) Salt Crust (B11) Drainage Patterns (B10) Water Marks (B1) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9)
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The state of the s		Surface Soil Cracks (B6) Stunted or Stresses Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)	Saturation (A3)
	Presence of Reduced Iron (C4) Shallow Aquitard (D3)		Saturation (A3)
	☐ Presence of Reduced Iron (C4) ☐ Shallow Aquitard (D3) ☐ Recent Iron Reduction in Tilled Soils (C6) ☐ FAC-Neutral Test (D5)		Saturation (A3)
Inundation Visible on Aerial Imagery (B7)	 □ Presence of Reduced Iron (C4) □ Shallow Aquitard (D3) □ Recent Iron Reduction in Tilled Soils (C6) □ FAC-Neutral Test (D5) □ Stunted or Stresses Plants (D1) (LRR A) □ Raised Ant Mounds (D6) (LRR A) 	Inundation Visible on Aerial Imagery (B7)	Saturation (A3)
Sparsely Vegetated Concave Surface (B8)	 □ Presence of Reduced Iron (C4) □ Shallow Aquitard (D3) □ Recent Iron Reduction in Tilled Soils (C6) □ FAC-Neutral Test (D5) □ Stunted or Stresses Plants (D1) (LRR A) □ Raised Ant Mounds (D6) (LRR A) 	Specially Variation Congress Surface (B8)	Saturation (A3)
	Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stresses Plants (D1) (LRR A) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Grost-Heave Hummocks (D7)	Sparsely vegetated concave Surface (Bo)	Saturation (A3)
	Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stresses Plants (D1) (LRR A) George (B7) Presence of Reduced Iron (C4) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)	Sparsely vegetated Colicave Surface (66)	Saturation (A3)
	 □ Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soils (C6) □ FAC-Neutral Test (D5) 	To Laurdation Visible on Aerial Imagery (R7) To Other (Explain in Remarks) To Frost-Heave Hummocks (D7)	Saturation (A3) Salt Crust (B11) Drainage Patterns (B10) Dry-Season Water Table (C2) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) FAC-Neutral Test (D5)
	☐ Presence of Reduced Iron (C4) ☐ Shallow Aquitard (D3) ☐ Recent Iron Reduction in Tilled Soils (C6) ☐ FAC-Neutral Test (D5)	1 Inundation Visible on Aerial Imagery (R7)	Saturation (A3) Saturation (A3) Mater Marks (B1) Sediment Deposits (B2) Mydrogen Sulfide Odor (C1) Sediment Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Prainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
	☐ Presence of Reduced Iron (C4) ☐ Shallow Aquitard (D3) ☐ Recent Iron Reduction in Tilled Soils (C6) ☐ FAC-Neutral Test (D5)		Saturation (A3) Saturation (A3) Mater Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Saturation (A3) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) FAC-Neutral Test (D5)
Surface Soil Cracks (B6) Stunted or Stresses Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)	 □ Presence of Reduced Iron (C4) □ Shallow Aquitard (D3) □ Recent Iron Reduction in Tilled Soils (C6) □ FAC-Neutral Test (D5) 		Saturation (A3) Salt Crust (B11) Drainage Patterns (B10) Water Marks (B1) Dry-Season Water Table (C2) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Doxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) FAC-Neutral Test (D5)
Surface Soil Cracks (B6) Stunted or Stresses Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)	☐ Presence of Reduced Iron (C4) ☐ Shallow Aquitard (D3) ☐ Recent Iron Reduction in Tilled Soils (C6) ☐ FAC-Neutral Test (D5)		Saturation (A3) Salt Crust (B11) Drainage Patterns (B10) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Salt Crust (B11) Aquatic Invertebrates (B13) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Surface Soil Cracks (B6) Stunted or Stresses Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)	☐ Presence of Reduced Iron (C4) ☐ Shallow Aquitard (D3) ☐ Recent Iron Reduction in Tilled Soils (C6) ☐ FAC-Neutral Test (D5)		Saturation (A3)
Surface Soil Cracks (B6) Stunted or Stresses Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)	 □ Presence of Reduced Iron (C4) □ Shallow Aquitard (D3) □ Recent Iron Reduction in Tilled Soils (C6) □ FAC-Neutral Test (D5) 		Saturation (A3)
Surface Soil Cracks (B6) Stunted or Stresses Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)	 □ Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soils (C6) □ FAC-Neutral Test (D5) 		Saturation (A3)
<u> </u>	Presence of Reduced Iron (C4) Shallow Aquitard (D3)		Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Salt Crust (B11) Salt Crust (B11) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3)
<u> </u>	Presence of Reduced Iron (C4) Shallow Aquitard (D3)		Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Salt Crust (B11) Salt Crust (B11) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3)
<u> </u>	Presence of Reduced Iron (C4) Shallow Aquitard (D3)		Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Salt Crust (B11) Salt Crust (B11) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3)
<u> </u>	Presence of Reduced Iron (C4) Shallow Aquitard (D3)		Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Salt Crust (B11) Salt Crust (B11) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3)
<u> </u>	Presence of Reduced Iron (C4) Shallow Aquitard (D3)		Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Salt Crust (B11) Salt Crust (B11) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3)
<u> </u>	Presence of Reduced Iron (C4) Shallow Aquitard (D3)		Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Salt Crust (B11) Salt Crust (B11) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3)
	Presence of Reduced Iron (C4) Shallow Aquitard (D3)		Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Salt Crust (B11) Salt Crust (B11) Aquatic Invertebrates (B13) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3)
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Iron Deposits (R5) Recent Iron Reduction in Tilled Soils (C6) FAC-Neutral Test (D5)		Surface Soil Cracks (B6) Stunted or Stresses Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)	Saturation (A3)
		Surface Soil Cracks (B6) Stunted or Stresses Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)	Saturation (A3)
The state of the s		Surface Soil Cracks (B6) Stunted or Stresses Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)	Saturation (A3) Salt Crust (B11) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Salt Crust (B11) Salt Crust (B11) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2)
, igai materioristico		Surface Soil Cracks (B6) Stunted or Stresses Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)	Saturation (A3) Salt Crust (B11) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Salt Crust (B11) Salt Crust (B11) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2)
		Surface Soil Cracks (B6) Stunted or Stresses Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)	Saturation (A3)
1931 1141 21 31		Surface Soil Cracks (B6) Stunted or Stresses Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)	Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Salt Crust (B11) Salt Crust (B11) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2)
, iigal mat el 9, act (e 1)		Surface Soil Cracks (B6) Stunted or Stresses Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)	Saturation (A3) Salt Crust (B11) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Salt Crust (B11) Salt Crust (B11) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2)
, iigal mat el 9, act (e 1)		Surface Soil Cracks (B6) Stunted or Stresses Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)	Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Salt Crust (B11) Salt Crust (B11) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2)
Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Snailow Aquitard (D3)		Surface Soil Cracks (B6) Stunted or Stresses Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)	Saturation (A3)
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Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Li Shallow Aquitard (D3)		Surface Soil Cracks (B6) Stunted or Stresses Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)	Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Salt Crust (B11) Salt Crust (B11) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2)
1931 1141 21 31		Surface Soil Cracks (B6) Stunted or Stresses Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)	Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Salt Crust (B11) Salt Crust (B11) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2)
		Surface Soil Cracks (B6) Stunted or Stresses Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)	Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Salt Crust (B11) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)
		Surface Soil Cracks (B6) Stunted or Stresses Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)	Saturation (A3)
Iron Denosits (R5) Recent Iron Reduction in Tilled Spils (C6) FAC-Neutral Test (D5)		Surface Soil Cracks (B6) Stunted or Stresses Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)	Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Salt Crust (B11) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2)
		Surface Soil Cracks (B6) Stunted or Stresses Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)	Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Salt Crust (B11) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)
, iga mater state (e.g.		Surface Soil Cracks (B6) Stunted or Stresses Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)	Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Salt Crust (B11) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2)
Algai mat or Crust (64) Presence of Reduced from (C4) Shallow Addition (D3)		Surface Soil Cracks (B6) Stunted or Stresses Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)	Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Salt Crust (B11) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)
Algal Mat or Crust (B4)		Iron Deposits (B5)	Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Salt Crust (B11) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)
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Algal Mat or Crust (R4) Presence of Reduced Iron (C4) Shallow Aquitard (D3)		Iron Deposits (B5)	Saturation (A3)
		Iron Deposits (B5)	Saturation (A3)
Dilit Deposits (D5) Oxidized (Vilizosphieres along Elving (Voca (O5))	Ovidized Unizoskitotes giolid Flauld (200)	Iron Deposits (B5)	Saturation (A3) Salt Crust (B11)
Drift Deposits (B3) ☐ Oxidized Rhizospheres along Living Roots (C3) ☐ Geomorphic Position (D2)	☐ Oxidized Rhizospheres along Living Roots (C3) ☐ Geomorphic Position (D2)	Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stresses Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)	Saturation (A3) Salt Crust (B11) Water Marks (B1) Sediment Deposits (B2) Sediment Deposits (B2) Salt Crust (B11) Salt Crust (B11) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2)	Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2)	Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stresses Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)	Saturation (A3)
Priff Denosits (R3)	☐ Oxidized Rhizospheres along Living Roots (C3) ☐ Geomorphic Position (D2)	Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stresses Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)	Saturation (A3)
and the contract of the contra		Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Sturted or Stresses Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)	Saturation (A3) Salt Crust (B11) Drainage Patterns (B10) Water Marks (B1) Aquatic Invertebrates (B13) Dry-Season Water Table (C2)
		Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stresses Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)	Saturation (A3) Salt Crust (B11) Drainage Patterns (B10) Water Marks (B1) Dry-Season Water Table (C2)
		Drift Deposits (B3)	Saturation (A3) Salt Crust (B11) Drainage Patterns (B10)
		Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Sturted or Stresses Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)	Saturation (A3)
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$=$ \cdot \cdot \cdot		Drift Deposits (B3)	Saturation (A3) Salt Crust (B11) Drainage Patterns (B10)
Segment Deposits (B2) — nydrogen Suilide Odor (C1) — Saturation visible on Aerial imagery (C1)	1 i mydrogen Suitige Odor (C1) I i Saturation visible on Aenal imadely (C3)	Drift Deposits (B3)	Saturation (A3) Salt Crust (B11) Drainage Patterns (B10)
Sediment Deposits (B2)	☐ Hydrogen Sulfide Odor (C1) ☐ Saturation Visible on Aerial Imagery (C9)	Drift Deposits (B3)	Saturation (A3) Salt Crust (B11) Drainage Patterns (B10)
		Sediment Deposits (B2)	
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Water Marks (B1)	Aquatic Invertebrates (B13) Dry-Season Water Table (C2)	Water Marks (B1)	High Water Table (A2) (except MLRA 1, 2, 4A, and 4B) (MLRA 1, 2, 4A, and 4B)
Saturation (A3) Salt Crust (B11) Drainage Patterns (B10) Water Marks (B1) Dry-Season Water Table (C2)	Aquatic Invertebrates (B13) Dry-Season Water Table (C2)	Saturation (A3) Salt Crust (B11) Drainage Patterns (B10) Water Marks (B1) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Iron Deposits (B5) Surface Soil Cracks (B6) Stunted or Stresses Plants (D1) (LRR A) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Saturation Visible on Aerial Imagery (C9) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)	
High Water Table (A2)	□ Salt Crust (B11) □ Drainage Patterns (B10) □ Aquatic Invertebrates (B13) □ Dry-Season Water Table (C2)	High Water Table (A2)	Surface Water (A1) Water-Stained Leaves (B9) Water-Stained Leaves (B9)
High Water Table (A2) (except MLRA 1, 2, 4A, and 4B) (MLRA 1, 2, 4A, and 4B) Saturation (A3) Salt Crust (B11) Drainage Patterns (B10) Water Marks (B1) Aquatic Invertebrates (B13) Dry-Season Water Table (C2)	(except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)	High Water Table (A2) Saturation (A3) Salt Crust (B11) Drainage Patterns (B10) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Water Marks (B1) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Surface Soil Cracks (B6) Stunted or Stresses Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)	
Surface Water (A1)	Water-Stained Leaves (B9) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) (MLRA 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Drainage Patterns (B10) □ Aquatic Invertebrates (B13) □ Dry-Season Water Table (C2)	Surface Water (A1)	
Surface Water (A1)	□ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) (MLRA 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Drainage Patterns (B10) □ Aquatic Invertebrates (B13) □ Dry-Season Water Table (C2)	Surface Water (A1)	Wetland Hydrology Indicators:

Project Proj
Mary Harwards & Andriene Wilness Section Township, Ranges 2211-85
Subregion (LRP):
Soil Map Unit Name: Mapped as Sumas sitt Som
Are Cimatic / hydrologic conditions—in the site typical for this time of year?
Are Vegetation
SummaRY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes
Hydrophytic Vegetation Present?
Hydrophytic Vegetation Present?
Hydric Soil Present? Yes No Sew No Sew No No Sew No No No Sew No No No No No No No N
Wetland Hydrology Present? Yes No Within a Wetland? Wetland Hydrology Present? Yes No Within a Wetland? Wetland Hydrology Present? Yes No Within a Wetland? Wetland Delineation Manual: Western Mountains, Valleys and Coast Region, Version 2.0 (USACOE, 2010), relict features still meet the technical definition of hydroiz soil. No current evidence of wetland hydrology was observed. The parcel in question appears to be effectively drained by surrounding ditches. VEGETATION – Use scientific names of plants
Remarks: Observed hydric soil indicators appear to be relict redoximorphic features. According to the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Region, Version 2.0 (USACOE, 2010), relict features still meet the technical definition of hydric soil. No current evidence of wetland hydrology was observed. The parcel in question appears to be effectively drained by surrounding ditches. VEGETATION – Use scientific names of plants
Wetland Delineation Manual: Western Mountains, Valleys and Coast Region, Version 2.0 (USACOE, 2010), relict features still meet the technical definition of hydric soil. No current evidence of wetland hydrology was observed. The parcel in question appears to be effectively drained by surrounding ditches. VEGETATION – Use scientific names of plants Tree Stratum (Plot size:
Absolute
Absolute
Number of Dominant Species 2
2.
3
4
Sapling/Shrub Stratum (Plot size:) That Are OBL, FACW, or FAC:
Sapling/Shrub Stratum (Plot size:
2.
3
4
5
50% =, 20% =
Herb Stratum (Plot size: 12' dm) 1. Agrostis sp. 30 yes FAC Column Totals:
1. Agrostis sp. 30 yes FAC Column Totals: (A) (B) 2. Poa pratensis 60 yes FAC Prevalence Index = B/A =
2. Poa pratensis 60 yes FAC Prevalence Index = B/A =
3. Holcus lanatus 5 no FAC Hydrophytic Vegetation Indicators: 4. Trifolium repens 2 no FAC □ 1 - Rapid Test for Hydrophytic Vegetation 5. Ranunculus repens 2 no FAC ☑ 2 - Dominance Test is >50% 6. Taraxacum officinale 1 no FACU □ 3 - Prevalence Index is ≤3.0¹ 7 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
4. Trifolium repens 2 no FAC □ 1 - Rapid Test for Hydrophytic Vegetation 5. Ranunculus repens 2 no FAC □ 2 - Dominance Test is >50% 6. Taraxacum officinale 1 no FAC □ 3 - Prevalence Index is ≤3.0¹ 7 □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □
5. Ranunculus repens 2 no FAC
6. <u>Taraxacum officinale</u> 1 no <u>FACU</u> 3 - Prevalence Index is ≤3.0¹ 7 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
7 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
8 data in Remarks or on a separate sheet)
5
10 Problematic Hydrophytic Vegetation (Explain)
11 1ndicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size:)
1
2 Hydrophytic
FOY4 → 20%4 → Total Cover
Tiesent:
% Bare Ground in Herb Stratum
Tiesent:

Profile Descr Depth								C 11 1			mpling Point: P	4	•	
Depth	iption: (Describ		depth	needed	d to do			nfirm the abse	nce of indica	tors.)				
	Matri						Features	. 2				D		
(inches)	Color (moist)		%	Cold	or (moi:	st) %	Type ¹	Loc ²	Texture			Remarks	· · · · · · · · · · · · · · · · · · ·	
<u>0-8</u>	10YR3/3	_	00					DI M	sitt loa		——————————————————————————————————————	rnhia fantu	***	
<u>8-11</u>	2.5Y6/3		80	<u>/.</u> :	5YR4/6	<u>20</u>	<u>C</u>	PL, M	clay lo		Relict redoximo	rpnic reatu	res	
<u>8-11</u>	10YR3/3	_	100	7.5					silt loa			rnhia faatu	rec	
<u>11-15</u>	<u>2.5Y6/3</u>	3	<u>50</u>	7.5 Y	'R4/4-4	<u>1/6 50</u>	<u>C</u>	<u>PL,M</u>	clay lo		Relict redoximo	irpriic leatu	165	
				-					w/ hig	J U	ash content			
	***************************************	_		_										
		_		-										
		— Nonlotion		- Dodusos	d Matri	v CS=Covered		nd Grains	2l ocation: Pi	— =Pore I	 _ining, M=Matrix	,		
	ncentration, D=D							nu Giallis.			for Problemati		oils ^{3,}	
	ndicators: (Appl	iicabie t	o an L	KKS, UF	_						n Muck (A10)	c riyuric o	VIIS .	
☐ Histoso						Sandy Redox (Stripped Matrix					Parent Materia	I /TF2)		
	Epipedon (A2)					Loamy Mucky		avcant MI RA	_		Shallow Dark	, ,	F12)	
	listic (A3)					Loamy Gleyed		except with	" -		er (Explain in Re		12)	
	en Sulfide (A4)		1441			•			ب	Otti	er (Explain iii 10	emarks)		
	ed Below Dark Su		411)			Depleted Matri								
	ark Surface (A12	•				Redox Dark Su			3ln	dicators	of hydrophytic v	enetation :	and	
	Mucky Mineral (S	•				Depleted Dark				wetland	hydrology must	t be presen		
	Gleyed Matrix (S					Redox Depress	sions (F8)			unless o	listurbed or prob	blematic.		
	.ayer (if present)):												
Туре:									U- D40		V	5 2	N.	
Depth (inches Remarks:						relict redoximorp			ls Present?		Yes		No	
HYDROLO	GY													
Wetland Hvc														
	Irology Indicato	rs:								,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
•	Irology Indicato ators (minimum o		equired	; check	all that	apply)			Seco	ondary l	ndicators (2 or n	nore requir	ed)	
Primary Indic			equired	; check	all that	apply) Water-Stained	Leaves (B9)		Seco		ndicators (2 or n Stained Leaves	····	ed)	
Primary Indic	ators (minimum		equired	; check			, ,	d 4B)		Water-		(B9)	ed)	
Primary Indic Surfac High V	ators (minimum o e Water (A1)		equired	; check		Water-Stained	1, 2, 4A, and	d 4B)		Water-	Stained Leaves	(B9) 4B)	ed)	
Primary Indic Surfac High V Satura	ators (minimum o e Water (A1) Vater Table (A2)		equired	; check		Water-Stained (except MLRA	1, 2, 4A, and	d 4B)		Water- (MLRA Draina	Stained Leaves	(B9) 4B) 0)	ed)	
Primary Indic Surfac High V Satura Water	ators (minimum of e Water (A1) Vater Table (A2) tion (A3)	of one re	equired	; check		Water-Stained (except MLRA Salt Crust (B1	1, 2, 4A, and 1) ebrates (B13)			Water- (MLRA Draina Dry-Se	Stained Leaves A 1, 2, 4A, and 4 ge Patterns (B1	(B9) 4B) 0) ble (C2)	•	
Primary Indic Surfac High V Satura Water Sedim	ators (minimum o e Water (A1) Vater Table (A2) tion (A3) Marks (B1)	of one re	equired	; check		Water-Stained (except MLRA Salt Crust (B1* Aquatic Inverte	1, 2, 4A, and 1) ebrates (B13) ide Odor (C1)			Water- (MLRA Draina Dry-Se Satura	Stained Leaves 1, 2, 4A, and 4 ge Patterns (B1 eason Water Tal	(B9) 4B) 0) ble (C2) Aerial Imag	•	
Primary Indic Surfac High V Satura Water Sedim Drift D	ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3)	of one re	equired	; check		Water-Stained (except MLRA Salt Crust (B1' Aquatic Inverte Hydrogen Sulfi	a 1, 2, 4A, and brates (B13) de Odor (C1) ospheres alon	g Living Roots		Water- (MLRA Draina Dry-Se Satura Geome	Stained Leaves A 1, 2, 4A, and 4 ge Patterns (B1 eason Water Tal tion Visible on A	s (B9) 4B) 0) ble (C2) Aerial Imag	•	
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Primary Indic Surfac High V Satura Water Sedim Drift D Iron Do	ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5)	of one re	equired	; check		Water-Stained (except MLRA Salt Crust (B1* Aquatic Inverte Hydrogen Sulfi Oxidized Rhizo Presence of Re Recent Iron Re	A 1, 2, 4A, and 1) berates (B13) ide Odor (C1) ospheres alon educed Iron (G	g Living Roots C4) led Soils (C6)	(C3)	Water- (MLRA Draina Dry-Se Satura Geome Shallor FAC-N	Stained Leaves 1, 2, 4A, and 4 ge Patterns (B1 eason Water Tal tion Visible on A priphic Position (W Aquitard (D3) leutral Test (D5)	(B9) 4B) 0) ble (C2) Aerial Imag (D2)	ery (C9)	
Primary Indic Surfac High V Satura Water Sedim Drift D Algal M Surfac	ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6	of one re				Water-Stained (except MLRA Salt Crust (B1* Aquatic Inverte Hydrogen Sulfi Oxidized Rhizo Presence of Ro Recent Iron Re Stunted or Stre	A 1, 2, 4A, and 1) bbrates (B13) ide Odor (C1) bspheres alon educed Iron (Geduction in Till esses Plants (g Living Roots C4) led Soils (C6)	(C3)	Water- (MLRA Draina Dry-Se Satura Geome Shallor FAC-N Raisec	Stained Leaves 1, 2, 4A, and 4 ge Patterns (B1 eason Water Tal tion Visible on A orphic Position (w Aquitard (D3) leutral Test (D5) I Ant Mounds (D	(B9) 4B) 0) ble (C2) Aerial Imag (D2))	ery (C9)	
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Primary Indic Surfac High V Satura Water Sedim Drift D Algal M Iron Do Surfac Inunda Sparse	ators (minimum of e Water (A1) Vater Table (A2) Ition (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6 ation Visible on Acely Vegetated Covations:	of one re) 6) erial Ima	agery (l	B7) (B8)		Water-Stained (except MLRA Salt Crust (B1* Aquatic Inverte Hydrogen Sulfi Oxidized Rhizo Presence of Re Recent Iron Re Stunted or Stre Other (Explain	1, 2, 4A, and the brates (B13) ide Odor (C1) ospheres alon educed Iron (G eduction in Till esses Plants (in Remarks)	g Living Roots C4) led Soils (C6)	(C3)	Water- (MLRA Draina Dry-Se Satura Geome Shallor FAC-N Raisec	Stained Leaves 1, 2, 4A, and 4 ge Patterns (B1 eason Water Tal tion Visible on A orphic Position (w Aquitard (D3) leutral Test (D5) I Ant Mounds (D	(B9) 4B) 0) ble (C2) Aerial Imag (D2))	ery (C9)	
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Primary Indic Surfac High V Satura Water Sedim Drift D Iron Do Surfac Inunda Sparse Field Observ Surface Water	ators (minimum of e Water (A1) Vater Table (A2) Ition (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) ition Visible on Acely Vegetated Covations: er Present? Present?	of one re) 6) erial Ima	agery (l	B7) (B8)		Water-Stained (except MLRA Salt Crust (B1* Aquatic Inverte Hydrogen Sulfi Oxidized Rhizo Presence of Re Recent Iron Re Stunted or Stre Other (Explain	A 1, 2, 4A, and 1) sebrates (B13) ide Odor (C1) sepheres alon educed Iron (Geduction in Till sesses Plants (in Remarks)	g Living Roots C4) led Soils (C6)	(C3)	Water- (MLRA Draina Dry-Se Satura Geome Shallo FAC-N Raisec Frost-h	Stained Leaves A 1, 2, 4A, and 4 ge Patterns (B1 eason Water Tal tion Visible on A orphic Position (w Aquitard (D3) eutral Test (D5) I Ant Mounds (D Heave Hummoc	(B9) 4B) 0) ble (C2) Aerial Imag (D2)) 06) (LRR A	ery (C9)	
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Primary Indic Surfac High V Satura Water Sedim Drift D Surfac Iron De Iron De Inunda Sparse Field Observ Surface Water Water Table Saturation Pr (includes cap	ators (minimum of the Water (A1) Vater Table (A2) Ition (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) ation Visible on Airely Vegetated Covations: er Present? Present?	of one re () (i) (ii) (iii) (iii	agery (I	B7) (B8) No No No		Water-Stained (except MLRA Salt Crust (B1* Aquatic Inverte Hydrogen Sulfi Oxidized Rhizo Presence of Re Recent Iron Re Stunted or Stre Other (Explain Depth (inc	a 1, 2, 4A, and brates (B13) de Odor (C1) ospheres alon educed Iron (Geduction in Till esses Plants (in Remarks) hes): hes):	g Living Roots C4) led Soils (C6) D1) (LRR A)	(C3)	Water- (MLRA Draina Dry-Se Satura Geome Shallo FAC-N Raisec Frost-h	Stained Leaves A 1, 2, 4A, and 4 ge Patterns (B1 eason Water Tal tion Visible on A orphic Position (w Aquitard (D3) eutral Test (D5) I Ant Mounds (D Heave Hummoc	(B9) 4B) 0) ble (C2) Aerial Imag (D2)) 06) (LRR A	ery (C9)	
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Project Site:	Hager- 2706020030	1900				City/Coun	ity: <u>Monroe</u>	/Snohomish	Sam	pling Date:		10/14/14	<u>1</u>
Applicant/Owner:	Jim Hager							State: <u>W</u>	<u>/A</u> Sam	pling Point:		<u>P5</u>	
Investigator(s):	Mary Harenda & An	drew Wones					Section	on, Township	, Range: 2	2,27N,6E			
Landform (hillslope, te	rrace, etc.): River	valley			Loca	l relief (conc	ave, convex, r	none): <u>nor</u>	<u>ne</u>	5	Slope (%): <u>1</u>	
Subregion (LRR):	A		Lat: 47	7.85035	<u>5</u>		Long: -1	22.007652		Datu	m: <u>W</u>	GS 84	
Soil Map Unit Name:	Mapped as Sumas	s silt loam						NW	VI classificat	tion: <u>N/A</u>	1		
Are climatic / hydrolog	ic conditions on the s	ite typical for th	nis time (of year?	Υ	es 🛭	No 🗆] (If no, ex	plain in Ren	narks.)			
Are Vegetation	, Soil ⊠, orl	Hydrology 🗀], sign	ificantly	disturbed	l? Are "	Normal Circur	mstances" pre	esent?	Y	es	⊠ No	
Are Vegetation	, Soil □, orl	Hydrology 🗀], natu	rally pro	blematic	? (If ne	eded, explain	any answers	s in Remark	(s.)			
SUMMARY OF FIR	IDINGS – Attach	site map sho	wing s	amplii	ng point	locations	, transects,	important	features,	etc.			
Hydrophytic Vegetation	n Present?		Yes	⊠ N	· 🗆	la tha Came	nlad Auga						
Hydric Soil Present?			Yes	⊠ N	。	is the Sam within a We)	'es	□ No	•
Wetland Hydrology Pr	esent?		Yes	□ N	o ⊠								
Remarks: Observe	d hydric soil indicat	ors appear to	be relic	t redox	morphic	features. A	ccording to t	he Regional	Suppleme	nt to the Co	rps of	Engine	ers
Wetland	Delineation Manual n of hydric soil. No	: Western Mou current eviden	intains, ce of w	Valleys etland l	and Coa vdrolog	st Region, \ v was obser	Version 2.0 (U ved. The par	JSACOE, 20' cel in questic	10), relict to on appears	eatures still s to be effec	meet tively	tne tecr drained	by
	ding ditches.				.,				•••				
VEGETATION - U	se scientific name	es of plants											
Tree Stratum (Plot siz	ze:)		Absolute % Cover		ninant cies?	Indicator Status	Dominance	e Test Works	sheet:				
1		-					Number of	Dominant Sp	ecies	2			(Δ)
2		_			_		That Are Of	BL, FACW, o	r FAC:	<u>2</u>			(A)
3		_					Total Numb	er of Domina	ant	<u>2</u>			(B)
4		_					Species Ac	ross All Strat	a:	=			(-/
50% =, 20% =		-		= T	otal Cove	er		Dominant Sp		1	00		(A/B)
Sapling/Shrub Stratus	<u>m</u> (Plot size:)						That Are O	BL, FACW, o	or FAC:				
1		-					Prevalence	e Index work					
2		-			-			Total % Co	ver of:		iultiply	by:	
3		-		_			OBL specie	_			1 =		
4		-					FACW spec	-			2 =		
5		-			_		FAC specie				3 =		
50% =, 20% =		-		= 1	otal Cove	er	FACU spec				4 =		
Herb Stratum (Plot si	ze: <u>12' dm</u>)						UPL specie	es _		×	5 =		(D)
1. Ranunculus repe	<u>ns</u>	9	<u>60</u>	yes	!	FAC	Column To		(A)				(B)
2. <u>Poa pratensis</u>		2	<u>25</u>	yes		FACU				x = B/A =			
3. <u>Trifolium repens</u>		-	<u>15</u>	no		FAC	1 _ ` ` `	tic Vegetatio					
4		-			-			apid Test for	•	c vegetation			
5		-					-	ominance Te					
6		-			_		Ì	revalence Ind	_				
7		-						orphological a ata in Remark				ing	
8,		-		_	_			etland Non-V			.,		
9		-					1_						
10		-			_		☐ Probl	ematic Hydro	ophytic Veg	etation (Exp	ilain)		
11		-			_		¹ Indicators	of hydric soil	and wetlan	d hydrology	must		
50% = <u>50</u> , 20% = <u>20</u>		_	<u>100</u>	= 1	otal Cove	er	be present,	, unless distu	rbed or pro	blematic.			
Woody Vine Stratum	(Mot size:)									., ,			
1		-		-	_		Hydrophyt	tic					
2		-					Vegetation		Yes	\boxtimes		No	
50% =, 20% =				= 1	otal Cove	‡ 1	Present?						
% Bare Ground in He	erb Stratum												
Remarks:													

rome Desci												
Donth			pui neede	eu to uc	ocument the indi	Features	in the absence	e or maioator	,			
Depth	Matrix			las (mai			Loc ²	 Texture		Remarks		
nches)	Color (moist)			lor (moi	st) %	Type'		silt loam		Tremants		
<u>0-3</u>	10YR3/2	<u>100</u>					DI M			ornhic feature	c	
<u>3-9</u>	2.5Y3/2	<u>80</u>	<u>/</u>	.5YR4/6	<u>20</u>	<u>C</u>	<u>PL, M</u>	clay loan		orphic reature	<u>s</u>	
<u>3-9</u>	10YR4/2	<u>100</u>					***************************************	silt loam				
<u>9-15</u>	10YR3/2	<u>100</u>						see righ				
<u>9-15</u>	<u>2.5Y6/3</u>	<u>80</u>	7	.5YR5/6	<u>20</u>	<u>C</u>	<u>PL,M</u>	clay loan	n Relict redoxime	orpnic teature	<u>s</u>	
***************************************			-									
			_									
ype: C= Cc	oncentration, D=De	epletion, F	M=Reduc	ed Matri	x, CS=Covered o	r Coated Sand	Grains, ²	Location: PL=I	Pore Lining, M=Matri	×		
ydric Soil I	ndicators: (Appli	cable to a	III LRRs, ı	ınless c	therwise noted.)			Indic	ators for Problemat	ic Hydric So	ls³:	
Histosc	ol (A1)				Sandy Redox (S	55)			2 cm Muck (A10)			
Histic E	Epipedon (A2)				Stripped Matrix	(S6)			Red Parent Materia	al (TF2)		
] Black H	Histic (A3)				Loamy Mucky M	lineral (F1) (ex	cept MLRA 1)		Very Shallow Dark	Surface (TF1	2)	
	gen Sulfide (A4)				Loamy Gleyed N	Matrix (F2)			Other (Explain in R	emarks)		
	ed Below Dark Sur	face (A11)	\boxtimes	Depleted Matrix	(F3)						
•	Dark Surface (A12)	,	•		Redox Dark Sur	, ,						
	Mucky Mineral (S				Depleted Dark S				ators of hydrophytic		d	
-	Gleyed Matrix (S4	•			Redox Depressi				etland hydrology mus iless disturbed or pro			
	_ayer (if present):	•						uii	iless disturbed or pro	Dicitiatio.		
pe:	Layer (ii present).											
pth (inche:							Hydric Soils	Present?	Yes	· 🛛	No	
· · ·	Observed hydric Soil was tilled in the Corps of Eng	the past w ineers We al definitio	hich broug tland Delir	ht deep neation	er layers closer to Manual: Western	the surface. N Mountains, Val	undaries are s lo active pore leys and Coas	harp, not diffu linings were pr it Region, Vers	se. Features crumble resent. According to to sion 2.0 (USACOE, 2 arcel appears to be o	the Regional : 010), relict fe	Supplem atures st	ent t
emarks:	Observed hydric Soil was tilled in t the Corps of Eng meet the technica surrounding ditch	the past w ineers We al definitio	hich broug tland Delir	ht deep neation	er layers closer to Manual: Western	the surface. N Mountains, Val	undaries are s lo active pore leys and Coas	harp, not diffu linings were pr it Region, Vers	resent. According to t sion 2.0 (USACOE, 2	the Regional : 010), relict fe	Supplem atures st	ent to
emarks:	Observed hydric Soil was tilled in t the Corps of Eng meet the technica surrounding ditch	the past wineers We al definitiones.	hich broug tland Delir	ht deep neation	er layers closer to Manual: Western	the surface. N Mountains, Val	undaries are s lo active pore leys and Coas	harp, not diffu linings were pr it Region, Vers	resent. According to t sion 2.0 (USACOE, 2	the Regional : 010), relict fe	Supplem atures st	ent t
emarks: YDROLO	Observed hydric Soil was tilled in t the Corps of Eng meet the technica surrounding ditch	the past wineers We all definitiones.	hich broug tland Delir n of hydric	int deep neation soif. No	er layers closer to Manual: Western o current evidence	the surface. N Mountains, Val	undaries are s lo active pore leys and Coas	harp, not diffu linings were pr It Region, Vers served. The p	resent. According to t sion 2.0 (USACOE, 2	the Regional : 010), relict fe effectively dra	Supplem atures st ined by	ent t
emarks: YDROLO fetland Hydrimary Indic	Observed hydric Soil was tilled in t the Corps of Eng meet the technica surrounding ditch	the past wineers We all definitiones.	hich broug tland Delir n of hydric	int deep neation soif. No	er layers closer to Manual: Western o current evidence	o the surface. N Mountains, Val e of wetland hyd	undaries are s lo active pore leys and Coas	harp, not diffur linings were pr tt Region, Vers sserved. The p	resent. According to fision 2.0 (USACOE, 2 arcel appears to be e	the Regional : 010), relict fe effectively dra	Supplem atures st ined by	ent t
YDROLO /etland Hyd rimary Indic Surfac	Observed hydric Soil was tilled in the Corps of Eng meet the technics surrounding ditch	the past wineers We all definitiones.	hich broug tland Delir n of hydric	oht deep neation soif. No	er layers closer to Manual: Western o current evidence	o the surface. N Mountains, Val e of wetland hyd	undaries are s lo active pore leys and Coas drology was ob	harp, not diffur linings were pr It Region, Vers sserved. The p	resent. According to fision 2.0 (USACOE, 2 arcel appears to be e	the Regional : 010), relict fe effectively dra	Supplem atures st ined by	ent t
YDROLO Vetland Hyd rimary Indic Surfac High V	Observed hydric Soil was tilled in the Corps of Eng meet the technica surrounding ditch	the past wineers We all definitiones.	hich broug tland Delir n of hydric	oht deep neation soif. No	er layers closer to Manual: Western o current evidence t apply)	eaves (B9) 1, 2, 4A, and 4	undaries are s lo active pore leys and Coas drology was ob	harp, not diffur linings were pr tt Region, Vers sserved. The p	resent. According to fision 2.0 (USACOE, 2 arcel appears to be educated appears to be educa	the Regional : 010), relict fe effectively dra more required s (B9)	Supplem atures st ined by	ent t
YDROLO Vetland Hydrimary Indic Surfac High V Satura	Observed hydric Soil was tilled in the Corps of Eng meet the technics surrounding ditch of the Corps of Eng meet the technical surrounding ditch of the Corps of	the past wineers We all definitiones.	hich broug tland Delir n of hydric	tht deep neation I soil. No	er layers closer to Manual: Western o current evidence t apply) Water-Stained L (except MLRA	eaves (B9)	undaries are s lo active pore leys and Coas drology was ob	harp, not diffur linings were pr tt Region, Vers sserved. The p Second	resent. According to fision 2.0 (USACOE, 2 arcel appears to be a dary Indicators (2 or Nater-Stained Leaves	the Regional : 010), relict fe effectively dra more required s (B9) 4B) 10)	Supplem atures st ined by	ent t
YDROLO Vetland Hydrimary Indic Surfac High V Satura Water	Observed hydric Soil was tilled in the Corps of Eng meet the technics surrounding ditch of the Corps of Eng meet the technics surrounding ditch of the Corps of t	the past wineers We all definitiones.	hich broug tland Delir n of hydric	ont deep neation soil. No	er layers closer to Manual: Western o current evidence t apply) Water-Stained L (except MLRA Salt Crust (B11)	eaves (B9) 1, 2, 4A, and 4 porates (B13)	undaries are s lo active pore leys and Coas drology was ob	harp, not diffur linings were pr tt Region, Vers sserved. The p	resent. According to facion 2.0 (USACOE, 2 arcel appears to be of dary Indicators (2 or Nater-Stained Leaves MLRA 1, 2, 4A, and Drainage Patterns (B)	the Regional in the second of	Supplem atures st ined by	ent t
YDROLO YDROLO Tetland Hydrimary Indice Surface High V Satura Water Sedim	Observed hydric Soil was tilled in the Corps of Eng meet the technica surrounding ditch of GY drology Indicators (minimum of the Water (A1) Water Table (A2) ation (A3) Marks (B1) ment Deposits (B2)	the past wineers We all definitiones.	hich broug tland Delir n of hydric	tht deep neation soil. No	er layers closer to Manual: Western o current evidence t apply) Water-Stained L (except MLRA Salt Crust (B11) Aquatic Invertet	eaves (B9) 1, 2, 4A, and 4) prates (B13) de Odor (C1)	undaries are s lo active pore leys and Coas drology was ob	harp, not diffur linings were pr tt Region, Vers sserved. The p	dary Indicators (2 or Water-Stained Leave: MLRA 1, 2, 4A, and Orainage Patterns (B) Ory-Season Water Ta	the Regional : 010), relict fe effectively dra more required s (B9) 4B) 10) tble (C2) Aerial Imager	Supplem atures st ined by	ent t
YDROLO Vetland Hydrimary Indic Surface High V Satura Water Sedim Drift D	Observed hydric Soil was tilled in the Corps of Eng meet the technica surrounding ditch of the Corps of Eng meet the technica surrounding ditch of the Corps of Eng meet the technica surrounding ditch of the Corps	the past wineers We all definitiones.	hich broug tland Delir n of hydric	tht deep neation soil. No	t apply) Water-Stained L (except MLRA Salt Crust (B11) Aquatic Invertet Hydrogen Sulfid Oxidized Rhizos	Deaves (B9) 1, 2, 4A, and 4 Deaves (B13) Le Odor (C1) Spheres along I	undaries are s lo active pore leys and Coas drology was ob	harp, not diffur linings were pr tt Region, Vers served. The p	dary Indicators (2 or Nater-Stained Leaves MLRA 1, 2, 4A, and Drainage Patterns (B: Ory-Season Water Ta	more required s (B9) 4B) 10) Aerial Imager (D2)	Supplem atures st ined by	ent t
YDROLO /etland Hyo rimary Indic Surfac High V Satura Water Sedim Drift D	Observed hydric Soil was tilled in the Corps of Eng meet the technica surrounding ditch of the Corps of Eng meet the technical surrounding ditch of the Corps of Eng meet the technical surrounding ditch of the Corps of the Corp	the past wineers We all definitiones.	hich broug tland Delir n of hydric	soil. No	t apply) Water-Stained L (except MLRA Salt Crust (B11) Aquatic Invertet Hydrogen Sulfid Oxidized Rhizos Presence of Re	eaves (B9) 1, 2, 4A, and 4 corates (B13) de Odor (C1) spheres along I duced Iron (C4	undaries are s lo active pore leys and Coas drology was ob	harp, not difful linings were pr tt Region, Vers served. The p	dary Indicators (2 or Nater-Stained Leaves MLRA 1, 2, 4A, and Drainage Patterns (B' Dry-Season Water Ta Saturation Visible on Geomorphic Position	more required s (B9) 4B) 10) Aerial Imager (D2)	Supplem atures st ined by	ent t
YDROLO Vetland Hydrimary Indic Surfac High V Satura Water Sedim Drift D Algal N	Observed hydric Soil was tilled in the Corps of Eng meet the technics surrounding ditch of the Corps of Eng meet the technics surrounding ditch of the Corps of Eng meet the technics surrounding ditch of the Corps	the past wineers Weal definition les.	hich broug tland Delir n of hydric	c all that	t apply) Water-Stained L (except MLRA Salt Crust (B11) Aquatic Invertet Hydrogen Sulfid Oxidized Rhizos Presence of Re- Recent Iron Rec	Leaves (B9) 1, 2, 4A, and 4 Leaves (B13) Le Odor (C1) Spheres along I duced Iron (C4 duction in Tilled	undaries are s lo active pore l leys and Coas drology was ob	harp, not diffur linings were pr t Region, Vers sserved. The p	dary Indicators (2 or Nater-Stained Leaves MLRA 1, 2, 4A, and Drainage Patterns (B) Dry-Season Water Ta Saturation Visible on Seamorphic Position Shallow Aquitard (D3)	more required s (B9) 4B) 10) Aerial Imager (D2) (D2)	Supplem atures st ined by	ent t
YDROLO Vetland Hydrimary Indic Surface High V Satura Water Sedim Drift D Algal N Iron D Surface	Observed hydric Soil was tilled in the Corps of Eng meet the technics surrounding ditch of the Corps of Eng meet the technics surrounding ditch of the Corps of Eng meet the technics surrounding ditch of the Corps	the past wineers Weal definition	hich broug	all that	t apply) Water-Stained L (except MLRA Salt Crust (B11) Aquatic Invertet Hydrogen Sulfid Oxidized Rhizos Presence of Re Recent Iron Rec Stunted or Stress	Leaves (B9) 1, 2, 4A, and 4 orates (B13) de Odor (C1) spheres along I duced Iron (C4 duction in Tilled sses Plants (D1	undaries are s lo active pore l leys and Coas drology was ob	harp, not diffur linings were pr t Region, Vers sserved. The p	dary Indicators (2 or Nater-Stained Leaves MLRA 1, 2, 4A, and Drainage Patterns (Boy-Season Water Tasaturation Visible on Geomorphic Position Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (I	more required s (B9) 4B) 10) Aerial Imager (D2) S) D6) (LRR A)	Supplem atures st ined by	ent t
YDROLO Yetland Hydrimary Indic Surface High V Satura Water Sedim Drift D Algal N Iron D Surface	Observed hydric Soil was tilled in the Corps of Eng meet the technics surrounding ditch of the Corps of Eng meet the technics surrounding ditch of the Corps of Eng meet the technics surrounding ditch of the Corps	the past wineers Weal definition es. s: f one requ rial Image	hich broughtand Delir n of hydric ired; check	c all that	t apply) Water-Stained L (except MLRA Salt Crust (B11) Aquatic Invertet Hydrogen Sulfid Oxidized Rhizos Presence of Re- Recent Iron Rec	Leaves (B9) 1, 2, 4A, and 4 orates (B13) de Odor (C1) spheres along I duced Iron (C4 duction in Tilled sses Plants (D1	undaries are s lo active pore l leys and Coas drology was ob	harp, not diffur linings were pr t Region, Vers sserved. The p	dary Indicators (2 or Nater-Stained Leaves MLRA 1, 2, 4A, and Drainage Patterns (B' Dry-Season Water Ta Saturation Visible on Seomorphic Position Shallow Aquitard (D3) FAC-Neutral Test (D5)	more required s (B9) 4B) 10) Aerial Imager (D2) S) D6) (LRR A)	Supplem atures st ined by	ent t
YDROLO Vetland Hydrimary Indic Surfac High V Satura Vater Sedim Drift D Algal N Iron D Surfac Inunda	Observed hydric Soil was tilled in the Corps of Eng meet the technica surrounding ditch of Corps of Eng meet the technica surrounding ditch of Corps of Eng meet the technica surrounding ditch of Corps of English of Corps of English of Corps of English o	the past wineers Weal definition es. s: f one requ rial Image	hich broughtand Delir n of hydric ired; check	all that	t apply) Water-Stained L (except MLRA Salt Crust (B11) Aquatic Invertet Hydrogen Sulfid Oxidized Rhizos Presence of Re Recent Iron Rec Stunted or Stress	Leaves (B9) 1, 2, 4A, and 4 orates (B13) de Odor (C1) spheres along I duced Iron (C4 duction in Tilled sses Plants (D1	undaries are s lo active pore l leys and Coas drology was ob	harp, not diffur linings were pr t Region, Vers sserved. The p	dary Indicators (2 or Nater-Stained Leaves MLRA 1, 2, 4A, and Drainage Patterns (Boy-Season Water Tasaturation Visible on Geomorphic Position Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (I	more required s (B9) 4B) 10) Aerial Imager (D2) S) D6) (LRR A)	Supplem atures st ined by	ent t
YDROLO Vetland Hydrimary Indic Surfac High V Satura Vater Sedim Drift D Algal N Iron D Surfac Inunda Sparse	Observed hydric Soil was tilled in the Corps of Eng meet the technical surrounding ditch of GY drology Indicators cators (minimum of the Water (A1) Water Table (A2) ation (A3) Marks (B1) Ment Deposits (B2) Deposits (B3) Mat or Crust (B4) Deposits (B5) De Soil Cracks (B6) ation Visible on Ae ely Vegetated Convations:	the past wineers Weal definition s: f one requ rial Image	hich broughtand Delir n of hydric ired; check ery (B7) ace (B8)	all that	t apply) Water-Stained L (except MLRA Salt Crust (B11) Aquatic Invertet Hydrogen Sulfid Oxidized Rhizos Presence of Re Recent Iron Rec Stunted or Stres Other (Explain i	Deaves (B9) 1, 2, 4A, and 4 Deaves (B13) Ite Odor (C1) Spheres along I duced Iron (C4 duction in Tilled sees Plants (D1 n Remarks)	undaries are s lo active pore l leys and Coas drology was ob	harp, not diffur linings were pr t Region, Vers sserved. The p	dary Indicators (2 or Nater-Stained Leaves MLRA 1, 2, 4A, and Drainage Patterns (Boy-Season Water Tasaturation Visible on Geomorphic Position Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (I	more required s (B9) 4B) 10) Aerial Imager (D2) S) D6) (LRR A)	Supplem atures st ined by	ent t
IYDROLO Vetland Hydrimary Indice Satura Water Sedim Drift D Algal N Iron D Surface Inunda Sparse ield Observ	Observed hydric Soil was tilled in the Corps of Eng meet the technica surrounding ditch of the Corps of Eng meet the technica surrounding ditch of the Corps of Eng meet the technica surrounding ditch of the Corps	the past wineers Weal definition les. s: f one required from the	hich broughtand Delir n of hydric n of hydric n of hydric ired; check ch	ant deep neation soil. No	t apply) Water-Stained L (except MLRA Salt Crust (B11) Aquatic Invertet Hydrogen Sulfid Oxidized Rhizos Presence of Re Recent Iron Rec Stunted or Stres Other (Explain i	Leaves (B9) 1, 2, 4A, and 4 1) 1) 1) 1) 1) 1) 1) 2) 2) 2)	undaries are s lo active pore l leys and Coas drology was ob	harp, not diffur linings were pr t Region, Vers sserved. The p	dary Indicators (2 or Nater-Stained Leaves MLRA 1, 2, 4A, and Drainage Patterns (Boy-Season Water Tasaturation Visible on Geomorphic Position Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (I	more required s (B9) 4B) 10) Aerial Imager (D2) S) D6) (LRR A)	Supplem atures st ined by	ent t
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Water Surface North Delivers of the second o	Observed hydric Soil was tilled in the Corps of Eng meet the technical surrounding ditch of GY drology Indicators cators (minimum of the Water (A1) Water Table (A2) ation (A3) Marks (B1) Ment Deposits (B2) Deposits (B3) Mat or Crust (B4) Deposits (B5) De Soil Cracks (B6) ation Visible on Ae ely Vegetated Convations: er Present? Present? Present?	the past wineers Weal definition les. s: f one required leave Surface	hich broughtand Delir n of hydric n of hydric ired; check ch	all that	t apply) Water-Stained L (except MLRA Salt Crust (B11) Aquatic Invertet Hydrogen Sulfid Oxidized Rhizos Presence of Re Recent Iron Rec Stunted or Stres Other (Explain i	Leaves (B9) 1, 2, 4A, and 4 1) Drates (B13) Ide Odor (C1) Spheres along I duced Iron (C4 duction in Tilled sees Plants (D1 n Remarks) Les): Les):	undaries are s lo active pore l leys and Coas trology was ob B) Soils (C6) (LRR A)	harp, not diffur linings were pr t Region, Vers sserved. The p	dary Indicators (2 or Nater-Stained Leaves MLRA 1, 2, 4A, and Drainage Patterns (Boy-Season Water Tasaturation Visible on Geomorphic Position Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (I	more required s (B9) 4B) 10) Aerial Imager (D2) Si) D6) (LRR A)	Supplem atures st ined by	ent to
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City of Monroe



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Buffers	STEEP SLOPES	40% or > slope				lands	ry No.
Critical Areas and Buffers	WETLANDS	Cat I	ACC Cat II	Section Cat III	S Cat IV	Unclassified Wetlands	
Critical /	STREAMS	Type 1	Type 3	Type 3u	Type 4	√ Type 5	V Unclassifed Stream

(#) Stream Inventory No.

BUFFERS*

BOUNDARIES

Monroe City Limits

Monroe City Limits

Shoreline Boundary

Notes:

Shoreline Boundary

Notes:

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Map date abown is the property of the sources listed below. Ineccuracies may still, and the City of Norther implies to merenties or greateries. Insurance in the City of Norther implies or the city of the City of Norther implies or extended using individually instructed distilled activation. Since may be not neighbor surport individually instructed distilled activation of Since in the value of Since City of Since in the value of Since City of Since in the value of Since City of Since in the Value of Since instruct surface or seasons and their grades activated and seasons surface or seasons and the surface of Since in the Value of Since in the Since

Source: City of Monroe GIS, 2008; The Watershed Company, Snohomish County GIS, 2007

Project: Monroe Critical Area Buffars 11x17 Localion: VIGISNo-permants/CD/Critical AreaSWonnoe critical eree buffer 2008 (12x4-08) 11x17-mari Revised: 12x4-08 Author, R. Wright

